

UNIVERSITY LIBRARY
FEB 20 1912

UNIV. OF MICH.

THE IRON AGE

VOL. LXXXVIII.

JULY—DECEMBER, 1911

NEW YORK :
DAVID WILLIAMS COMPANY,
239 West 39th Street.

THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX TILDEN FOUNDATION

500 FIFTH AVENUE NEW YORK CITY

1897

1898

1899

1900

1901

INDEX.

Illustrated articles indicated by *.

- A.**
- Academy of Political Science:
To Discuss Relation of Government to
Business, Oct 26 p 900
- Accidents:
American Ironmasters Safeguard Men,
Nov 16 p 1082
Coming Meeting of American Associa-
tion for Labor Legislation on Pre-
vention, Sept 7 p 507
Compulsory Safety Devices, Oct 5 p
719
Increasing Liability for Fatal, Aug 24
p 402
In German Iron and Steel Works, Dec
14 p 1413
Laws for Prevention, Aug 24 p 421
Molders' Safeguards, Nov 23 p 1108
Proposed Federal Compensation Bill,
Dec 14 p 1316
Safeguarding Workmen in Small
Plants, July 13 p 74
Safety as Applied to Grinding Wheels,
July 20 p 140
Safety Devices for Grinding Wheels,
Aug 17 p 349
Safety Measures May Be Too Thor-
ough, Aug 3 p 277
Standards of Safety in Relation to
Machinery,* July 13 p 88; July 20
p 160
With the Metal Press, Aug 3 p 279
- Acklin Stamping Company:
Toledo Metal Stamping Plant,* Sept
14 p 594
- Acme Automatic Engine, Sterling,* Sept
7 p 531
- Adamson, N. E., Jr.:
Time Study Observations,* Nov 16 p
1090
- Addy, Matthew, & Co.:
Cost of Producing Alabama Pig Iron,
Sept 7 p 545
- Adulteration of Oils, Detecting, July 13
p 91; Aug 17 p 386
- Aerial Camera, Woodbury & Co.'s,* Oct
19 p 869
- Aero Motor, Frontier Eight-Cylinder,*
Dec 7 p 1259
- Aeroplane Propeller Testing Plant,
Worcester Polytechnic,* July 20
p 152
- Africa, New Industry for South, Sept.
28 p 676
- Air Compressor Installation, Interesting
Chicago,* Dec 7 p 1258
- Air Compressor Installation, Notable,*
Sept 7 p 536
- Air Cylinders for Pyramid Pumps,
Goulds,* Aug 3 p 276
- Air Economizer, Sterling,* Oct 12 p 808
- Alabama Consolidated Coal & Iron Com-
pany:
Consolidation with Southern Iron &
Steel Company, Aug 24 p 421;
Oct 12 p 795
- Alabama Iron & Steel Company, Aug 24
p 421
- Alabama Pig Iron, Cost of Producing,
Sept 7 p 545
- Alabama's Governor Pleases Railroad
Interests, Nov 30 p 1204
- Albree, Chester B., Iron Works Com-
pany, July 13 p 123
- Alexander, W. W.:
Safety Measures May Be Too Thor-
ough, Aug 3 p 277
- Aligning of Shafting,* Oct 12 p 814
- Allen-Bradley Company:
Motor Starters,* Sept 21 p 646
- Allen, Irving C.:
Specifications for Purchase of Fuel
Oil for Government, Aug 3 p 261
- Allen, John F., Company:
New Riveter Hammer,* Oct 26 p 917
- Alliance Machine Company:
Crane Contracts, Nov 16 p 1073
- Allis-Chalmers Company:
To Reorganize, Dec 14 p 1315; Dec 21
p 1333
- Alloyed Steel in 1910, Production of, Oct
5 p 743
- Alloys, Titanium, with and Without
Aluminum, Nov 16 p 1056
- Alloys Used for Die-Castings, Sept 7 p
532
- Aluminum:
No International Syndicate, Oct 5 p
767
Pulleys for American Planers, Aug 3
p 271
Titanium Alloys with and Without,
Nov 16 p 1056
World's Production of, Sept 7 p 507
- Amalgamated Scale Signers, July 20 p
143
- American Association for Labor Legis-
lation:
Programme of Coming Meeting, Sept
7 p 507; Dec 21 p 1359
- American Blower Company:
Detroit Return Trap,* Nov 16 p 1088
Forced Blast Unit, 500-hp.,* Nov 30 p
1200
Monthly Informant, July 6 p 34
- American Bridge Company:
Monumental Bridge Contract, Nov 9
p 1024
New Pittsburgh Bridge, Aug 24 p 417
Yard Installation of Cleveland
Cranes,* Oct 5 p 762
- American Car & Foundry Company:
Annual Report, July 6 p 5
- American District Steam Company:
New Plant,* Dec 14 p 1300
- American Engineers for the New Steel
Works in India, Sept 21 p 623
- American Foundry Foremen's Associa-
tion, Nov 9 p 1042
- American Grondal Company:
To Concentrate Moose Mountain Ores,
Nov 30 p 1183
- American-Hawaiian Steamship Com-
pany:
New Vessels for Panama and Pacific
Trade, Oct 19 p 852
- American Institute of Mining Engi-
neers:
Excursion Features of San Francisco
Meeting, Sept 28 p 677
Meeting, Sept 21 p 639
Meeting of New York Section, Sept 28
p 682
- American Iron and Steel Association:
Iron Trade Statistics for 1910, Aug 3
p 249
- American Iron and Steel Institute:
Directors, Nov 2 p 956
Directory, Aug 31 p 449
Special Meeting, Oct 19 p 861
Use of Intoxicants by Steel Workers,
Dec 14 p 1277
- American Iron Trade Statistics for 1910,
Aug 3 p 249
- American Locomotive Company:
Annual Report, Sept 7 p 537
- American Manufacturers' Export Asso-
ciation:
Convention, Sept 28 p 678
- American Metal Hose Company:
Flexible Metal Hose and Tubing, Dec
28 p 1415
- American Museum of Safety:
Molders' Safeguards, Nov 23 p 1108
- American Opportunity in Europe, Sept
21 p 627
- American Oxhydric Company:
Electrolytic Generation of Oxygen
and Hydrogen, Aug 31 p 491
- American Rolling Mill Company:
Banquet of Salesmen, Sept 21 p 623
Entertains Culvert Manufacturers,
Dec 21 p 1367
New Works at Middletown, Ohio,*
Aug 31 p 478
Sheet and Pair Furnaces, Sept 14 p 578
- American Shipbuilding Company:
Annual Report, Oct 19 p 858
Two New Orders for Lake Vessels,
Nov 9 p 1020
- American Society for Testing Materials:
Action on Various Matters, Nov 9 p
1016
Convention Proceedings, July 6 p 20
Specifications for Spelter, Aug 17 p
387
Specifications for Steel Axles and
Shafts, Aug 24 p 425
Steel Reinforcement Bar Specifica-
tions, Aug 17 p 379
Year Book, Oct 19 p 869
- American Society of Mechanical En-
gineers:
Annual Meeting Announcement, Nov
16, p 1089
Convention Preliminaries, Dec 7 p
1219
Convention Proceedings, Dec 14 p
1290
Programme of Meeting, Nov 30 p 1171
Standard Boiler Rules, Sept 7 p 521
- American Specialty Company:
Twentieth Century Loose Pulley Oil
Cup,* July 27 p 214
- American Steel & Wire Company:
Steel Wire Gauge, Nov 16 p 1069
- American Steel Foundries:
Earnings, Oct 19 p 860; Nov 9 p 1016
- American Supply and Machinery Manu-
facturers' Association:
Campaign to Increase Membership,
Oct 19 p 865
- American Tool Works Company:
Aluminum Pulleys for Planers, Aug 3
p 271
- Analyses:
Improvement in Sulphur Tests, Aug
17 p 363
- Andresen-Evans Company:
Type B Grab Buckets,* Sept 7 p 549
Annealing Steel Castings,* Sept 7 p 542
- Ansaldo, G., Armstrong & Co.:
Case Hardening of Steel,* Nov 2 p 978
- Appalachian Exposition, Aug 3 p 284
- Armor Plate Decision, Oct 19 p 837
- Arsenals, Scientific Management at, Nov
9 p 1022
- Ashland Steel Company:
New Officers, Oct 19 p 849
- Atikokan Iron Company:
By-Product Coke Plant, Dec 28 p 1401
- Atkins, E. C., & Co.:
Hark Saw Machine,* Sept 28 p 694
- Atlantic & Pacific Transport Company:
Proposed Panama Steamship Line,
Sept 7 p 522
- Atlas Car & Mfg Company:
New Ore Car,* Sept 14 p 590
Ore Transfer Car,* Oct 5 p 751
- Atlas Dryer Company:
Ore Dryer, Sept 28 p 682
- Atlas Engine Works:
Crude-Oil Engine,* Sept 14 p 584
- Auchy, George:
Improvement in Sulphur Tests, Aug
17 p 363
Works Chemist's Protest Against Pa-
ternalism, Oct 26 p 886

- Autogenous Welding Not for the Weakened Structure, Oct 5 p 720
Automatic Pittsburgh Air Pump Company:
Air Compressors for Light Work, July 20 p 143
Automobiles:
MacLeod & Co., Oil-Fired Furnaces for Parts,* Nov 9 p 1036
Outlook for 1912, Aug 24 p 403
Rolling of Rims, Aug 21 p 488
Avery No 3 Drill Press, Cincinnati,* Sept 7 p 546
Avery Scale Company:
Automatic Scale,* Aug 31 p 490
Axles and Shafts, Specifications for Steel, Aug 24 p 425
Axles, Heat-Treated Steel, Nov 9 p 1005
- B.**
- Bagley, D.:
Benzol from Coke-Oven Gases,* Oct 5 p 756
Baird Machine Company:
Spring-Making Machines,* Sept 7 p 527
Baker Brothers:
Cylinder-Boring Machine,* Dec 7 p 1247
Baker, David:
Thin-Lined Blast Furnace Construction,* Dec 28 p 1400
Baldwin Locomotive Works:
To Have a Western Plant, Dec 21 p 1347
Baltimore & Ohio Railroad:
Chrome Steel Rails in Tunnels, Aug 31 p 463
Baltimore Business Organization, New, July 13 p 95
Baltimore Industrial Notes, Aug 3 p 283; Sept 14 p 592; Oct 12 p 831; Nov 2 p 981; Dec 14 p 1327
Bankruptcy Act, Safeguarding the, Sept 21 p 609
Baraduc-Muller, Dr. L.:
Carborundum for Special Steels, Nov 16 p 1086
Barb Wire Machine, Blashill & Gray Improved,* Aug 3 p 272
Barge Canal and Iron Ore Freights, New York's, Aug 24 p 417
Bar Iron Combination, Scotch, Sept 7 p 507
Barnes & McWilliam:
Nickel Steel, 3 Per Cent., Aug 10 p 326
Bars, Twisting of Reinforcing,* Sept 21 p 641
Bartlett, C. O., & Snow Company:
New Fueling Lighter,* Dec 14 p 1308
Basic Steel, Titanium and Low Carbon,* Dec 14 p 1306
Bates Machine Company:
Improved Corliss Valve Gear,* Aug 24 p 432
Battery, Storage, for the Steel Mill, Oct 19 p 859
Beaumont Iron Works:
Black Revolving Steam Feed,* Nov 9 p 1033
Belnap, Hiram W.:
Broken Lehigh Valley Rail, Nov 23 p 1126
Belting at the Turin Exposition, Schieren,* Oct 26 p 918
Belt, New Features of the Gandy, Sept 28 p 705
Bench, Sand-Mixing, Portable, Molder's,* Dec 21 p 1367
Benzol from Coke-Oven Gases,* Oct 5 p 756
Berger Mfg. Company:
Steel Racks for Pattern Storage,* Dec 7 p 1255
Steel Storage Bins, Oct 19 p 865
Berlin Chemical Laboratory:
Langrehr Safety Can for Gasoline,* Oct 19 p 866
Bernhardt, F.:
New Open-Hearth Furnace Construction,* Oct 12 p 816
Besly, Charles H., & Co.:
Disk Grinder,* Oct 19 p 862
Ring-Grinding Wheel Chuck,* July 20 p 165
Bessemer Gas Engine Company:
Gas Engines, Nov 9 p 1038
Bethlehem Steel Company:
New Blast Furnace Almost Completed, July 6 p 33
Seller of Pig Iron, Nov 23 p 1121
Betz-Pierce Company:
New Iron and Steel Jobbing House in Cleveland, July 27 p 199
Beyer, David S.:
Standards of Safety in Relation to Machinery,* July 13 p 88; July 20 p 160
Bierer and Fay:
Heat Treatment of Low-Carbon Nickel Steels, July 27 p 195
Bingham, W., Company:
Changes Ownership, Dec 28 p 1396
Birkinbine, John:
New York's Barge Canal and Iron Ore Freights, Aug 24 p 417
Birmingham Notes, July 13 p 96
Black, L. J.:
Revolving Steam Feed,* Nov 9 p 1033
Blake Specialty Company, Dec 21 p 1361
Blashill & Gray:
Improved Barb Wire Machine,* Aug 3 p 272
Blast Furnaces:
(See Furnaces, Blast)
Blatchley, Chas. A.:
Sewage Disposal for a Hardware Works,* July 13 p 112
Block-Pollak Company:
Interests, Oct 5 p 736
Blowers:
American 500-hp. Forced Blast Unit,* Nov 30 p 1200
Terry High-Pressure Set,* Nov 9 p 1040
Terry Turbo-Cupola,* Dec 28 p 1410
Boiler Plant Operation, Efficiency in, Aug 17 p 368
Boiler Rules, Standard, Sept 7 p 521
Boiler Tools, Heely,* Aug 24 p 432
Bone, Prof. William A.:
Remarkable Discovery in Gas Combustion,* Dec 7 p 1248
Bonuses and the Location of Industries, Aug 10 p 297
Bonus System Man and His Foreman, Oct 26 p 885
Book Reviews:
Copper Handbook, Oct 5 p 720
Cost Keeping and Scientific Management, July 27 p 192
General Foundry Practice, Aug 3 p 266
Handbuch der Mineralchemie (Manual of Mineral Chemistry), Part 1, Aug 3 p 266; Part 2, Dec 21 p 1348
Hendricks' Commercial Register of the United States, Sept 7 p 509
Iron and Steel: Their Production and Manufacture, July 27 p 192
Metallurgy of Tin, July 27 p 192
Principles of Industrial Engineering, Aug 3 p 266
Quelques Mots sur L'Industrie Metallurgique Russe (Some Words on the Russian Metallurgical Industry), July 13 p 97
Bope, H. P.:
Future Development of the Middle West, Nov 30 p 1186
Boring Machines:
Baker Cylinder,* Dec 7 p 1247
Kidder,* Dec 7 p 1257
Newton Combination, Portable, Drilling, Milling and,* Aug 10 p 331
Boston Chamber of Commerce:
Credit Unions for Employees, July 27 p 215
Bounty on Canadian Pig Iron, Proposed, Nov 30 p 1170
Bourne-Fuller Company:
Buys the Upson Nut Company, Nov 30 p 1182; Dec 7 p 1218
Bowser, S. F., & Co., Inc.:
Oil Pump House at Gary,* July 27 p 203
Bradford Machine Tool Company:
Lathe Relieving Attachment,* Aug 31 p 474
Brady, F. W.:
Patents and the Public Welfare, Nov 2 p 950
Brass Manufacturers, National Association of: Meetings, July 6 p 34; Dec 28 p 1414
Bretaud, J. V.:
Steel Converter Installations, Oct 19 p 857
Bridgeport Safety Emery Wheel Company:
Combination Grinding Machine,* July 6 p 59
Bridges:
Chicago-Milwaukee Rapid Repair,* Dec 28 p 1399
Monumental Contract Let, Nov 9 p 1024
New Pittsburgh, Aug 24 p 417
Briquetting Flue Dust, General Briquetting Company, Dec 14 p 1295
Briquetting Process for Ores and Flue Dust, Weiss, Nov 30 p 1185
Bristol Company:
Recorder with Frictionless Inking Device,* Nov 30 p 1201
British and American Export Trade, Nov 2 p 935
British-Columbian Mining in 1910, Aug 3 p 293
British Handbook for Iron Founders, July 13 p 96
British Iron and Steel Exports and Imports, Aug 24 p 421
British Iron and Steel Exports Stationary, Aug 3 p 235
British Iron and Steel Market, Aug 3 p 266; Sept 21 p 624; Nov 23 p 1121
British Steel Imports, Move to Reduce, Oct 12 p 794
British Steel Trade, Rebate Plan in, Dec 14 p 1277
British Wage Earners, Nov 2 p 951
Bronn and Schemann:
Molten Ferromanganese for Deoxidation, Oct 12 p 801
Brown & Sharpe Mfg. Company:
Castellating Attachment,* Aug 31 p 491
New Fine Measurement Tools,* Dec 7, p 1246
Brown Hoisting Machinery Company:
Coal-Handling Plant at Duluth,* Dec 7 p 1240
Improved Slag Bucket,* Dec 7 p 1257
Browning Engineering Company:
New Crane,* Sept 7 p 541
Wrecking Crane with Steam Shovel Attachment,* Dec 7 p 1260
Brown Instrument Company:
Expansion, Aug 17 p 387
New Electric Recording Instrument,* Nov 9 p 1042
Brown Iron Ores, Preparation of, Sept 7 p 528
Brown-Ketcham Iron Works:
Failure, Sept 21 p 643
Bruce-Macbeth Engine Company:
Gas Engine Orders, Nov 23 p 1109
Brush, F. & M., New Wire,* Nov 2 p 981
Brussels, Belgium:
International Steel Conference, July 13 p 74; July 20 p 144; Aug 3 p 252
Buck, D. M.:
Iron and Steel Roofing Sheets, Nov 23 p 1145
Buckets:
Andresen-Evans Type B Grab,* Sept 7 p 549
Improved Brown Slag,* Dec 7 p 1257
Buck, Rudolf:
Users of Blast Furnace Gas, Oct 26 p 902
Bucyrus Company:
Hand Book of Steam Shovel Work, Sept 28 p 695; Oct 12 p 799
Buffalo:
Freight Rate Reductions from, Aug 24 p 414
Industrial Week in, Nov 23 p 1121

Ship Canal Lock at, Dec 28 p 1385
 Buffalo Forge Company:
 Conoidal Fan,* Dec 28 p 1414
 Buffalo Union Furnace Company:
 Industrial Railroad Case, Dec 28 p 1397
 Building Code, Ohio's State, Sept 7 p 526
 Bullard Machine Tool Company:
 To Prevent Leaks in Overhead Costs,* Nov 23 p 1139
 Bunnell, Sterling H.:
 Making Machines Earn Their Living, July 27 p 194
 Standardizing Factory Expense and Cost, Nov 16 p 1072
 Bureau of Mines:
 Demonstrations, Sept 28 p 705
 Producer Gas Investigations, Nov 30
 Burt Mfg. Company:
 Automatic Oiling System,* July 13 p 111
 New Oil Filter,* Oct 12 p 819
 Ventilator,* Sept 28 p 693
 Business, What Is the Matter with, Sept 14 p 565

C.

Cableways, Panama Canal,* Oct 12 p 812
 Calder, John:
 Organizer of Men in Management, Nov 2 p 958
 Caldwell, E. R., & Co.:
 Air Compressor,* Oct 19 p 871
 California, Sunshine in, Oct 12 p 794
 Cambria Steel Company:
 Axles and Forgings, Nov 2 p 981
 Briquetting Flue Dust, Dec 14 p 1295
 First Steel Rails Rolled at Johnstown, Nov 9 p 1002
 Visited by Engineers, Nov 30 p 1185
 Wire and Nail Catalogue, July 6 p 5
 Workers' Reunion,* Oct 5 p 740
 Camera, Aerial, Woodbury & Co.'s,* Oct 19 p 869
 Canada:
 Blashill & Gray Improved Barb Wire Machine,* Aug 3 p 272
 British-Columbian Mining in 1910, Aug 3 p 293
 Duty on Wrought Pipes or Tubes, Nov 16 p 1076
 Electro Steel Company of Canada, Ltd., at Judicial Sale, July 20 p 153
 Iron and Steel Output, Nov 9 p 1016
 National Bridge Company, Aug 31 p 463
 New Mills for Steel Company of Canada, Dec 14 p 1298
 Proposed Bounty on Pig Iron, Nov 30 p 1170
 Titaniferous Ores Used in the United States, Oct 19 p 865
 To Concentrate Moose Mountain Iron Ores, Nov 30 p 1183
 Canadian Sirocco Company, Ltd., Nov 16 p 1076
 Canal Commission Bids, Isthmian, Nov 16 p 1069; Nov 23 p 1146
 Canal Equipment Contract, Panama Hydraulic, Dec 21 p 1347
 Canal Gates, Engineers Inspect Panama, July 20 p 129
 Canal Lock at Buffalo, Ship, Dec 28 p 1385
 Canal, Locomotives to Tow Ships Through Panama, Oct 26 p 903
 Can for Gasoline, Langrehr Safety,* Oct 19 p 866
 Canton Foundry & Machine Company:
 New Geared Ratchet Lifting Jack,* July 6 p 43
 Canton Industrial Notes, Nov 2 p 984
 Carborundum for Special Steels, Nov 16 p 1086
 Carden, Capt. Godfrey L.:
 American Opportunity in Europe, Sept 21 p 627
 Cargo Transference at Steamship Terminals, Nov 23 p 1151
 Carnahan Tin Plate & Sheet Company:
 Genuine Charcoal Iron Tin Plate, Sept 7 p 549

Carnegie Steel Company:
 Furnace Slags in Concrete, July 13 p 90
 Heat-Treated Steel Axles, Nov 9 p 1005
 New Shape Book, Nov 16 p 1076
 Steel Derricks and Drilling Rigs, July 27 p 202
 Carnegie Veterans' Association:
 Dinner, Dec 14 p 1298
 Carpenter, A. W.:
 Metal Corrosion in Gaseous Atmosphere, Aug 31 p 461
 Cars:
 All-Steel Passenger, Oct 26 p 898
 Atlas Ore Transfer,* Oct 5 p 751
 Buying Movement, Nov 23 p 1106
 Chicago Exceptionally Large Tank, Nov 16 p 1085
 Hamfelt Blast Furnace Charging,* Nov 9 p 1039
 New Atlas Ore,* Sept 14 p 590
 Pennsylvania 52-Ft. Steel, Dec 7 p 1255
 Superiority of Steel, Nov 23 p 1138
 Westinghouse Steel Transformer,* Aug 3 p 278
 Cartwright & Eaton, Ltd.:
 New Industry for South Africa, Sept 28 p 676
 Case Hardening, Observations on,* July 27 p 213
 Case Hardening of Steel,* Nov 2 p 978
 Castelling Attachment, Brown & Sharpe,* Aug 31 p 491
 Cast Iron, Physical Properties of, Nov 16 p 1077
 Castings:
 Alloys Used for Die, Sept 7 p 532
 Annealing Steel,* Sept 7 p 542
 Steel from Electric Furnace,* July 20 p 148
 Stock Process for Steel,* Sept 7 p 524
 Treadwell Electric Steel, Dec 21 p 1333
 William Sellers Machine Molding for Large,* Dec 28 p 1412
 Caterpillar Traction Engine, Holt,* Aug 10 p 334
 Cement:
 Production in 1910, Nov 23 p 1164
 Use of Portland, July 6 p 3
 Census Bureau's Report on Iron and Steel, Aug 31 p 470
 Centering Machine, New Fay & Scott,* July 20 p 150
 Chain, Taylor Tisco Manganese Steel,* Oct 19 p 868
 Challenge Machine Company, Inc.:
 New Combination Grinder,* July 27 p 212
 Changes and Better Business, Economic, Sept 21 p 610
 Chaplet, McCarroll Ideal,* July 27 p 221
 Chapman, Cloyd M.:
 Sulphuric Acid Corrosion Test,* July 13 p 99
 Charging Car, Hamfelt Blast Furnace,* Nov 9 p 1039
 Chatillon, Commentry & Neuves-Maisons Steel Corporation:
 Highly Reputable French Steel, Dec 14 p 1305
 Chattanooga Manufacturers' Association, July 27 p 192
 Chemistry, International Congress in 1912, Oct 26 p 904
 Chemist's Protest Against Paternalism, Works, Oct 26 p 886
 Cheney, Edward J.:
 Flywheels for Motor-Driven Rolling Mills, Sept 28 p 700
 Chester, Pa.:
 Steel Castings Trade, July 27 p 204
 Chicago Business Men's Pluck, Sept 7 p 505
 Chicago Engineers' Club:
 New Building, July 6 p 56
 Chicago, Milwaukee & St. Paul Railroad:
 Rapid Bridge Repair,* Dec 28 p 1399

Chicago Pneumatic Tool Company:
 Interesting Air Compressor Installation,* Dec 7 p 1258
 Chicago Steel Car Company:
 Exceptionally Large Tank Car, Nov 16 p 1085
 Chilled Roll Process, New National,* Oct 5 p 766
 Chimney Gases, Diffusing Noxious, Dec 21 p 1367
 Chimney, Wiederholt,* Sept 28 p 689
 Chinese Exports of Pig Iron and Iron Ore, Sept 28 p 700
 Chrome Steel Rails in Tunnels, Aug 31 p 463
 Chronograph, Stromberg Electric,* Nov 16 p 1084
 Chucks:
 Besly Ring Grinding Wheel,* July 20 p 165
 Gardner Ring Wheel,* Nov 16 p 1087
 Keystone Insert Jaws,* Oct 5 p 750
 Machine & Tool Quick Change Drill,* Dec 7 p 1255
 Schuchardt & Schutte Columbia,* Aug 3 p 282
 Cincinnati and Its Manufacturing Suburbs, Sept 28 p 681
 Cincinnati Bickford Tool Company:
 New Plant,* July 6 p 26
 Cincinnati Meeting for Promotion of Industrial Education, Oct 26 p 887
 Cincinnati Metal Trades Dinner, Dec 14 p 1295
 Cincinnati Planer Company:
 Special Planer Drive,* Nov 23 p 1152
 Cincinnati Pulley Machinery Company:
 Avey No. 3 Drill Press,* Sept 7 p 546
 Cino Iron Body Gate Valve, Williams,* Oct 19 p 871
 Cleveland Crane & Engineering Company:
 Economical Sand and Stone Handling,* July 27 p 204
 Handling Freight with a Gantry Crane,* Aug 31 p 467
 Installation at American Bridge Company's Plant,* Oct 5 p 762
 New Crane Trolley,* Nov 30 p 1203
 Cleveland Pneumatic Tool Company:
 Air Drill for Close Quarters,* Sept 14 p 590
 New Four-Piston Air Drills,* Aug 31 p 476
 Cleveland Twist Drill Company:
 Some Recent Drilling Records,* July 27 p 215
 Coal:
 Production in 1910, Sept 7 p 523
 Handling Plant at Duluth,* Dec 7 p 1240
 World's Production of, Nov 30 p 1185
 Coke:
 Benzol from Oven Gases,* Oct 5 p 756
 By-Product Plant for Atikokan Furnace, Dec 28 p 1401
 Connellsville Producers Demand Lower Freight Rates, Sept 21 p 621
 Connellsville Trade, Oct 5 p 736; Oct 12 p 813; Oct 19 p 851; Oct 26 p 900; Nov 9 p 1020; Nov 23 p 1109
 Indiana Electrical Equipment of Gary Plant,* Dec 28 p 1406
 Largest By-Product Plant in the World, Dec 14 p 1311
 New Flat Rate, July 6 p 7
 Oven Gas as an Open-Hearth Fuel, Sept 7 p 538
 Oven Gas Engine Plant, 15,000-hp., Dec 21 p 1354
 Production and By-Products Saved, July 27 p 198
 Colburn Machine Tool Company:
 New Heavy-Duty Drill Press,* July 27 p 210
 Colorado Fuel & Iron Company:
 Annual Report, Nov 16 p 1088
 Columbia Chuck, Schuchardt & Schutte,* Aug 3 p 282
 Columbia Motor Car Company:
 Knight Gasoline Engine,* Aug 10 p 328

- Combustion:**
 Flameless Surface, Dec 7 p 1217
 Remarkable Discovery in Gas,* Dec 7 p 1248
- Combustion Utilities Corporation:**
 Decision on Gas-Producer Operation, Oct 12 p 818
- Compensation Bill, Proposed Federal,**
 Dec 14 p 1316
- Compressors:**
 Caldwell Air,* Oct 19 p 871
 Chicago Interesting Air Installation,* Dec 7 p 1258
 Notable Air Installation,* Sept 7 p 536
 Sargent Two-Stage Gas-Driven Air, July 27 p 221
 Vilter Ammonia,* Sept 14 p 596
- Comptometer, New Felt & Tarrant,***
 Sept 14 p 583
- Concrete Engineering, Album on, Nov**
 9 p 1021
- Conference, International Steel, July 13**
 p 74; July 20 p 144
- Congress on Chemistry in 1912, International, Oct 26 p 904**
- Connellsville Coke Producers Demand Lower Freight Rates, Sept 21 p 623**
- Conservation Congress, Sept 7 p 521**
- Consolidated Expanded Metal Companies:**
 Album on Concrete Engineering, Nov 9 p 1021
- Consolidations, Southern Iron, Aug 24**
 p 421
- Contracts in the Iron Trade, Scale, Dec**
 14 p 1274
- Controllers:**
 Cutler-Hammer Automatic Oil Pump,* Dec 7 p 1258
 Electric Automatic Motor,* Nov 30 p 1199
- Control of Large Business, Federal,**
 Nov 9 p 1016
- Conventions:**
 American Manufacturers' Export Association, Sept 28 p 678
 American Society for Testing Materials, July 6 p 20
 American Society of Mechanical Engineers, Dec 7 p 1219; Dec 14 p 1290
 Association of Iron and Steel Electrical Engineers, Sept 28 p 678; Oct 5 p 737
 Foundrymen's at Buffalo in June, 1912, Dec 7 p 1259
 International Railway General Foremen's Association, Aug 3 p 284
 Lake Superior Mining Institute, Aug 31 p 462
 National Founders' Association, Nov 16 p 1068; Nov 23 p 1130
 National Gas and Gasoline Engine Trades Association, Dec 7 p 1233; Dec 14 p 1289
 National Implement and Vehicle Association, Oct 19 p 851
 National Machine Tool Builders' Association, Oct 12 p 796; Oct 19 p 857
 National Supply and Machinery Dealers' Association, Oct 12 p 798; Oct 19 p 857
 Society for the Promotion of Industrial Education, Nov 9 p 1020
- Converter Installations, Bretnaud Steel,**
 Oct 19 p 857
- Cooler New Power Specialty Water,***
 Nov 9 p 1034
- Co-operation in the Steel Trade, After Effects of, Sept 14 p 562**
- Co-operation in the Steel Trade, International, Aug 3 p 234**
- Copper:**
 And Brass Specifications, Old, July 27 p 200
 Production and Stocks, June, July 13 p 96; July, Aug 10 p 318; August, Sept 14 p 589; September, Oct 12 p 795; October, Nov 16 p 1068; November, Dec 14 p 1295
 Why the European Market Advances, Dec 28 p 1385
- Core Room Conveyor System, Symington,* July 27 p 217**
- Corona Mfg. & Supply Company:**
 Flexible Metallic Hose,* July 27 p 221
 Drill Socket,* Aug 10 p 233
 Corporation Commission, Dec 14 p 1297
- Corporations, Government Control of Large, Dec 7 p 1236**
- Corrigan, McKinney & Co.:**
 New Steel Plant at Cleveland, Nov 23 p 1108; Dec 14 p 1298
- Corrosion in Gaseous Atmosphere, Metal, Aug 31 p 461**
- Corrosion Test, Sulphuric Acid,* July**
 13 p 99
- Costs:**
 Bullard System to Prevent Leaks in Overhead,* Nov 23 p 1139
 Correct Distribution of, July 27 p 194
 Electric Power, July 27 p 199
 Getting Steel Costs Down, Dec 14 p 1274
 Interest Charges and Profit,* Aug 24 p 426
 Overhead Expense and Cost Systems, Oct 19 p 835
 Producing Alabama Pig Iron, Sept 7 p 545
 Southern Pig Iron, Sept 21 p 642
 Standardizing Factory Expense and, Nov 16 p 1072
- Cotton Planters Combine to Maintain Prices, Aug 31 p 446**
- Cox, Jennings S., Jr.:**
 Ore Loading at El Cuero Mines,* Oct 5 p 752
- Cranes:**
 Browning Wrecking with Steam Shovel Attachment,* Dec 7 p 1260
 Cleveland Economical Sand and Stone Handling,* July 27 p 204
 General Electric Battery Truck,* Nov 30 p 1200
 Handling Freight with a Cleveland Gantry,* Aug 31 p 467
 Interesting Pawling & Harnischfeger Installation,* July 6 p 35
 McMyler 35-Ton Shipbuilding,* Nov 16 p 1092
 New Browning,* Sept 7 p 541
 New Cleveland Trolley,* Nov 30 p 1203
 New Cutler-Hammer Panel,* Nov 16 p 1081
 Northern Engineering Coal Handling,* Dec 21 p 1359
 Special Reading,* Sept 28 p 704
 Toledo Special Coal Handling,* Aug 10 p 321
 Yard Installation at American Bridge Company's Plant,* Oct 5 p 762
- Crank Motion, Stockbridge,* Oct 5 p 760**
- Credit Unions for Employees, July 27**
 p 215
- Cross Creek Coal Company, Dec 14 p 1317**
- Croton Magnetic Iron Mines Suit, Aug**
 24 p 418
- Crozier, General William:**
 Scientific Management at United States Arsenal, Nov 9 p 1022
- Crucible Steel Company of America:**
 Annual Report, Oct 19 p 870
- Crusher, Jeffrey Single Roll Coal,* Dec**
 7 p 1251
- Crusher Litigation, Nov 16 p 1092**
- Cuba:**
 Ore Loading at El Cuero Mines,* Oct 5 p 752
 Sintering of Mayari Iron Ores in,* Sept 14 p 586
 Cupola and Air Furnace Combined, Holland,* Sept 21 p 644
- Cushman, Dr. Allerton S.:**
 Pure Irons from the Open-Hearth Furnace, July 13 p 94
- Custer Sandless Casting Company:**
 Permanent Mold Rights, Dec 28 p 1409
- Customs Decisions:**
 Alcohol Smoothing Irons, July 13 p 75
- Automobile Tire Bolts, Nov 2 p 986**
- Book Sewing Machines, Dec 21 p 1346**
- Cotton Belting, Nov 2 p 986**
- Earthenware and Metal Steam Exhausters, Aug 31 p 460**
- Ecclesiastical Cast Iron Statuary, July**
 27 p 191
- Forged and Turned Steel Shafts, Dec**
 21 p 1346
- Hydraulic Motors and Pumps, Nov 2**
 p 986
- Iron Sand, Dec 21 p 1346**
- Japanned Sheets, Dec 21 p 1346**
- Knitting Machines, Nov 2 p 986**
- Locomotives, Dec 7 p 1235**
- Manganese Metal, Dec 21 p 1346**
- Metal Blocks, Dec 7 p 1235**
- Needles for Embroidery Machines,**
 July 27 p 191
- Nut Washers, Sept 21 p 642**
- Old Sugar Mill Shafts, Dec 21 p 1346**
- Railroad Supplies, Dec 7 p 1235**
- Scrap Iron or Steel, Aug 17 p 369**
- Sewing Machines, July 27 p 191; Nov**
 2 p 986
- Sheet Iron Drums or Containers, July**
 27 p 191; Aug 18 p 369; Aug 31 p 460; Sept 21 p 642; Nov 2 p 986
- Sheet Steel Cask Linings, Nov 2 p 986**
- Sheet Steel Stampings, Dec 7 p 1235**
- Steel Rods, Sept 21 p 642**
- Steel Rolls for Calico Printing, Nov**
 2 p 986
- Steel Shapes, Aug 17 p 369**
- Steel Strips in Coils, Dec 21 p 1346**
- Steel Window Sash, Dec 7 p 1235**
- Tin Cans, Nov 2 p 986**
- Toy Sewing Machines, Nov 2 p 986**
- Wire-Bound Hose, July 13 p 75**
- Wire Drawing Plates, July 13 p 75;**
 Aug 17 p 369
- Wolfram Ore, Nov 2 p 986**
- Cutler-Hammer Mfg. Company:**
 Automatic Oil Pump Controller,* Dec 7 p 1258
 New Crane Panel,* Nov 16 p 1081
 Two Thomas Meter Installations, Aug 31 p 464
- Cutting and Welding Machine, Davis-Bournonville,* Aug 31 p 472**
- D.**
- Dahlstrom Metallic Door Company:**
 Superiority of Steel Cars, Nov 23 p 1138
- Darlington Forge Company, Ltd.:**
 Stock Process for Steel Castings,* Sept 7 p 524
- Davis-Bournonville Company:**
 Increased Facilities, July 6 p 25
 Welding and Cutting Machine,* Aug 31 p 472
- Day, Percy C.:**
 Herringbone Gears,* Dec 21 p 1364
- Dean Bros. Steam Pump Works:**
 Special Air Pump and Jet Condenser,* July 6 p 58
- DeBats Crucible Steel Company, Dec**
 14 p 1288
- Decision, Armor Plate, Oct 19 p 837**
- Decision, Molding Machine Patent, Dec**
 14 p 1276
- Decision on Gas-Producer Operation,**
 Oct 12 p 818
- Decisions of Interest to Manufacturers,**
 Judicial, July 27 p 201; Aug 10 p 345; Aug 17 p 397; Aug 31 p 466; Sept 21 p 647; Oct 19 p 872; Nov 16 p 1093; Dec 21 p 1348
- Dennison Mfg. Company:**
 Tags for Factory Operating Systems, Sept 7 p 522
- Department of Commerce and Labor:**
 Sailing Dates in Foreign Commerce, Aug 17 p 363
- Derricks and Drilling Rigs, Steel, July**
 27 p 202
- Detroit Return Trap, American,* Nov**
 16 p 1088
- Detroit Steel Products Company:**
 Example of Good Machine Shop Lighting,* July 20 p 164

- Deutscher Eisenhuettenleute's Meeting, Oct 12 p 802
- Devlin, Thomas, Mfg. Company: Sewage Disposal for a Hardware Works,* July 13 p 112
- Diamond Saw & Stamping Works: New Sterling Power Hack-Saw Machine,* Sept 7 p 547
- Die-Castings, Alloys Used for, Sept 7 p 532
- Die, Improved National-Acme Spring,* Nov 30 p 1204
- Diemer, Hugo: Shop System of Ferracute Machine Company,* July 13 p 106
- Direct Metal Stimulates Construction, Dec 28 p 1383
- Dock, New Concrete-Steel Ore,* Nov 9 p 1041
- Dodge Mfg. Company: Bearings in Long Service, Oct 19 p 858
- Iron-Center Wood-Rim Pulley Test, Nov 2 p 956
- Shop Erection and Testing of All Important Work, Dec 21 p 1367
- Dog, Hill Face Plate,* Aug 17 p 383
- Dresses Machine Tool Company: Drill, Radial, 6-ft.,* Oct 26 p 920
- Improved Simplex Radial Drill,* Nov 30 p 1195
- Drilling Machines: Cincinnati Avey No. 3 Drill Press,* Sept 7 p 546
- Cleveland Air for Close Quarters,* Sept 14 p 590
- Corona Drill Socket,* Aug 10 p 333
- Dresses Improved Simplex,* Nov 30 p 1195
- Dresses 6-Ft. Radial,* Oct 26 p 920
- Foot-Burt Multiple-Spindle Stay Bolt,* Nov 23 p 1153
- Foster Hydro-Pneumatic Radial,* July 27 p 206
- Hisey-Wolf Converting Attachment,* Nov 2 p 985
- Hisey-Wolf Portable Electric Bench,* Oct 19 p 866
- Langelier Combination Saw and,* Dec 7 p 1254
- Langelier Semi-Automatic Rivet,* July 20 p 155
- New Cleveland Four-Piston Air,* Aug 31 p 476
- New Colburn Heavy-Duty Press,* July 27 p 210
- New Foot-Burt High-Duty,* July 20 p 163
- New Prentice Radial,* Oct 26 p 916
- New Sibley Motor-Driven,* Aug 31 p 473
- New Silver,* Nov 30 p 1202
- New Snyder Heavy-Duty,* Oct 12 p 821
- New Van Dorn & Dutton Portable Electric,* July 20 p 158
- Sibley Box Column,* Nov 2 p 968
- Special Langelier,* Aug 17 p 382
- Washburn 15-In.,* Dec 28 p 1410
- Washburn Motor-Driven,* Sept 28 p 701
- Washburn Multiple-Spindle,* Oct 26 p 915
- Willey Motor-Driven Bench,* Sept 21 p 645
- Drilling Records, Some Recent,* July 27 p 215
- Driver, C. H.: Drill Rack,* Sept 7 p 550
- Dudley, P. H.: Ductility in Rail Steel, July 13 p 97
- Duff Mfg. Company: Ball-Bearing Journal Jack,* Sept 14 p 597
- Duluth: Coal-Handling Plant at,* Dec 7 p 1240
- New Minnesota Steel Plant at,* Nov 30 p 1196
- President Farrell on the Steel Corporation's Plans for, Sept 21 p 626
- Duty on Wrought Pipes or Tubes, Canadian, Nov 16 p 1076
- Dwight-Lloyd System of Sintering Fine Iron-Bearing Materials, Aug 24 p 422*; Dec 21 p 1349
- Dwyer, W. A.: Proposed Michigan Corporate Excess Tax, Dec 21 p 1333
- E.
- Eastern Steel Company: To Lease Warwick Iron & Steel Company, Dec 21 p 1333; Dec 28 p 1398
- East Texas Brown Ore Mining & Development Company: New Plant, July 27 p 197
- Easton, Pa., Sunday Call: What Is the Matter With Business? Sept 14 p 565
- Ebbw Vale Steel, Iron & Coal Company, Ltd.: American and German Steel Displace Welsh Workers, Aug 31 p 471
- Eclipse Pipe Hangers, Morgan,* Dec 7 p 1256
- Economic Changes and Better Business, Sept 21 p 610
- Economies, Iron Industry's, Oct 5 p 718
- Economizer, Sterling Air,* Oct 12 p 808
- Economy Welding Machine Company: Welding Machine,* Nov 9 p 1037
- Edenborn, William: Suit Over a Southern Iron Company Promotion, Oct 26 p 911
- Editorials: After Effects of Co-operation in the Steel Trade, Sept 14 p 562
- American Steel Prices Below Foreign, Dec 21 p 1330
- Any Readjustment Will Include Labor, Aug 24 p 401
- Appeal to Prejudice, Nov 30 p 1169
- Autogenous Welding Not for the Weakened Structure, Oct 5 p 720
- Basing Prices on a Normal Business, Sept 28 p 663
- Bonus System Man and His Foreman, Oct 26 p 885
- British and American Blast Furnace Activity, Aug 17 p 348
- British and American Export Trade, Nov 2 p 935
- British Iron and Steel Exports Stationary, Aug 3 p 235
- Buying of Replacement Parts, Oct 12 p 782
- Campaign Against Factory Fires, July 20 p 128
- Cancellation of the Hill Ore Lease, Oct 26 p 884
- Car Buying Movement, Nov 23 p 1106
- Chicago Business Men's Pluck, Sept 7 p 505
- Close Time Study of Factory Operations, Nov 9 p 1000
- Coming Demand for Machine Tools, Dec 14 p 1275
- Coming Machinery Meeting, Sept 21 p 609
- Commercialized Engineering, Nov 16 p 1055
- Compulsory Safety Devices, Oct 5 p 719
- Congressman Underwood's Boast of Cheap Iron, Sept 7 p 505
- Cotton Planters Combine to Maintain Prices, Aug 31 p 446
- Curve of Pig Iron Production,* Oct 12 p 780
- Demand for Second-Hand Machinery, Dec 21 p 1332
- Direct Metal Stimulates Construction, Dec 28 p 1383
- Do Congressmen Enjoy Ruinous Steel Prices? Nov 30 p 1170
- Educational Value of an Export Trade, Oct 12 p 781
- Electrification at Lake Superior Mines, Sept 14 p 562
- Excluding Private Liability Insurance, Oct 26 p 885
- Flameless Surface Combustion, Dec 7 p 1217
- Germany's Industrial Policy as a Model, Aug 31 p 446
- Getting Steel Costs Down, Dec 14 p 1274
- Health of Employees, Oct 5 p 719
- Human Obstacle to Evolution, July 6 p 3
- Idle Hours in Machine Shops, Dec 28 p 1384
- Important Discovery Regarding Oil Adulteration, July 13 p 72
- Improvement in the Steel Trade, Dec 21 p 1330
- Increasing Cost of Workmen's Compensation, Nov 23 p 1107
- Increasing Liability for Fatal Accidents, Aug 24 p 402
- Increasing Railroad Traffic, July 27 p 178
- Industrial Campaign Against Sickness, Aug 10 p 297
- Inspecting Fire Equipment, Nov 16 p 1056
- Insurance Against Strikes, Oct 5 p 719
- Intermountain Railroad Rate Decision, Aug 3 p 235
- International Co-operation in the Steel Trade, Aug 3 p 234
- Iron and Steel Works Improvements, Nov 16 p 1054
- Iron Industry's Economics, Oct 5 p 718
- Is Government Interference with Business Culminating? Sept 21 p 608
- Keeping Down Idle Labor, Nov 2 p 935
- Labor Agitation and Railroad Machinery Purchases, Oct 5 p 720
- Labor and Lower Prices for Commodities, Sept 7 p 504
- Labor and the Efficiency System, Aug 31 p 447
- Lake Shipbuilding at Low Ebb, Aug 31 p 448
- Latent Service of Scientific Management, Aug 17 p 348
- Lime Light on Factory Lighting, Oct 12 p 781
- Los Angeles Confessions, Dec 7 p 1216
- Mammoth in Steam Power Generators, Nov 9 p 1001
- Misrepresenting Machinery Deliveries, Sept 28 p 663
- Model Navy Repair Ship, July 20 p 127
- No Potential Monopoly in Steel, Nov 23 p 1107
- Our Improved Foreign Trade Balance, July 27 p 179
- Overhead Expense and Cost Systems, Oct 19 p 835
- Oxy-Acetylene Welding Menaced, Nov 9 p 1001
- Permanency in Shop Buildings, Aug 24 p 401
- Piece-Rate Cutting, Sept 14 p 563
- Place of 1911 in the Pig Iron Record, Nov 30 p 1170
- Problem in Steel Tempering, July 20 p 126
- Proposed Bounty on Canadian Pig Iron, Nov 30 p 1170
- Prosperous Conditions in Germany, Nov 16 p 1107
- Railroad Earnings Fairly Good, July 6 p 2
- Relative Tonnages of Finished Products, Aug 10 p 296
- Safeguarding the Bankruptcy Act, Sept 21 p 609
- Safeguarding Workmen in Small Plants, July 13 p 74
- Safety Devices for Grinding Wheels, Aug 17 p 349
- Scale Contracts in the Iron Trade, Dec 14 p 1274
- September's Record Merchandise Exports, Oct 26 p 885
- Sick Benefits and Society Physicians, Dec 7 p 1217
- Small Unit Producer Gas Engines, Nov 9 p 1001
- Some Iron Ore Fallacies, Nov 9 p 1000

- Spheres of Wrought Iron and Rolled Steel, Nov 30 p 1168
 Statistics of Blast Furnace Flux, Aug 17 p 349
 Steel and Commodity Prices, Aug 24 p 400
 Steel Corporation and Disintegration, Sept 28 p 662
 Steel Makers Move for Lower Freights, Oct 19 p 834
 Steel Mill Labor and Hot Weather, July 20 p 126
 Suit to Dissolve the Steel Corporation, Nov 2 p 934
 Suiting Processes to Conditions, July 13 p 72
 Tin Plate Imports and Exports, Oct 12 p 782
 To-day's and Other Price Levels, Sept 21 p 608
 Trade Statistics, Dec 28 p 1382
 Trend of Railroad Revenues, Oct 19 p 834
 Trust Prosecutions, Nov 16 p 1055
 Turbo-Electric Hoisting Engines in Lake Mines, Sept 28 p 664
 Two Problems of Factory Building, Aug 3 p 236
 Undeveloped Asset, July 20 p 127
 Unfit Blast Furnaces, July 13 p 72
 United States Steel Corporation Helps Its Competitors, Aug 24 p 402
 Use of Portland Cement, July 6 p 3
 Ventilation in Factory Heating, Aug 10 p 297
 Wage Scale Settlements, July 6 p 2
 Workmen's Foolish Investments, July 13 p 73
 Education Convention, Industrial, Nov 9 p 1020
 Efficiency in Government Shops, Dec 28 p 1384
 Efficiency System and Labor, Aug 31 p 447
 Eight-hour Bill, House Passes an, Dec 21 p 1348
 El Cuero Mines, Ore Loading at,* Oct 5 p 752
 Electrical Engineers, Association of Iron and Steel:
 Convention, Sept 28 p 678; Oct 5 p 737
 Electrical Equipment of Gary Coke Plant, Indiana,* Dec 28 p 1406
 Electrical Exposition, New York, Oct 19 p 852
 Electrical Iron Smelting in Sweden,* Oct 12 p 804
 Electrical Storage Battery Company:
 Storage Battery for the Steel Mill, Oct 19 p 859
 Electric Controller & Mfg. Company:
 Automatic Motor Controllers,* Nov 30 p 1199
 Electric Induction Furnace Linings, Improvement in, Nov 30 p 1171
 Electric Lamp Trade, Sept 14 p 597
 Electric Loads, Minimizing Peak,* Aug 24 p 430
 Electric Power Charters in Pennsylvania, Many, Aug 17 p 350
 Electric Power Cost, July 27 p 199
 Electro Steel Company of Canada, Ltd.:
 At Judicial Sale, July 20 p 153
 Elevators, Modern Types of,* Aug 17 p 376
 Ellwood City, Pa.:
 Gets a New Industry, Oct 19 p 865
 Empire Steel & Iron Company:
 Record at a Crane Furnace, Oct 26 p 887
 Engineering, Commercialized, Nov 16 p 1055
 Engineering Societies, Growth of the, Aug 10 p 332
 Engines:
 Atlas Crude-Oil,* Sept 14 p 584
 Foos Kerosene Economy, July 6 p 5
 Holt Caterpillar Traction,* Aug 10 p 334
 Knight Gasoline,* Aug 10 p 328
 Late Features of the Vilter Corliss,* Dec 7 p 1261
 Mackintosh-Hemphill Interesting Order, Nov 30 p 1184
 Mesta Large Corliss Built in 16 Days,* Dec 7 p 1257
 Operation of Blast Furnace Gas, July 6 p 36
 Poppet Valve,* July 6 p 54
 Small Unit Producer, Nov 9 p 1001
 Sterling Acme Automatic,* Sept 7 p 531
 Turbo-Electric Hoisting in Lake Mines, Sept 28 p 664
 Worthington High-Duty Pumping,* Oct 5 p 764
 Wastes for Factory Heating,* July 27 p 208
 Webster & Perks New Internal Combustion,* Oct 12 p 820
 Equipment Orders, Railroad, July 13 p 97; July 20 p 142; Aug 3 p 282; Aug 24 p 402; Aug 31 p 464; Sept 21 p 629; Oct 26 p 901; Nov 23 p 1128; Nov 30 p 1183
 Ericsson Memorial Dinner, Nov 30 p 1170
 Erie City Iron Works:
 Poppet Valve Engine,* July 6 p 54
 Eschweiler Mining Company:
 Coke Oven Gas Engine Plant, 15,000-hp,* Dec 21 p 1354
 Espen-Lucas Machine Works, Inc.:
 Foundry Cold Saw,* Dec 14 p 1312
 Europe:
 American Opportunity in, Sept 21 p 627
 Iron Trade Active, Dec 28 p 1384
 Selling American Machine Tools in, July 6 p 40
 Selling American Machinery in, Aug 3 p 262
 Evolution, Human Obstacle to, July 6 p 3
 Ewald Iron Company:
 Historic Kentucky Mill Dismantled, July 27 p 199
 Expense, Overhead, Nov 30 p 1190
 Export Association, American Manufacturers':
 Convention, Sept 28 p 6-8
 Exporters Should Fully Describe Merchandise, Oct 12 p 820
 Exports and Imports of Iron and Steel:
 May, July 6 p 34; June, Aug 10 p 317; July, Sept 7 p 506; August, Oct 12 p 809; September, Nov 9 p 1021; October, Dec 7 p 1219
 Exports of Manufacturers Approaching Billion-Dollar Line, Nov 9 p 1035
 Exports, September's Record Merchandise, Oct 26 p 885
 Export Trade:
 American, Oct 5 p 744
 British and American, Nov 2 p 935
 Educational Value of an, Oct 12 p 781
 Expositions:
 Appalachian, Aug 3 p 284
 International, of Inventions, Aug 3 p 251
 Milwaukee Industrial, Sept 14 p 579
 New York Electrical, Oct 19 p 852
 Railroad Appliance, Oct 26 p 921
 F.
 F. & M. Company:
 New Wire Brush,* Nov 2 p 981
 Facing Machine, Rochester Duplex,* Dec 14 p 1299
 Factories, Fire Protection in, Aug 31 p 465
 Factory Building, Two Problems of, Aug 3 p 236
 Factory Expense and Cost, Standardizing, Nov 16 p 1072
 Factory Floors, Oct 12 p 799
 Factory Heating, Gas Engine Wastes for,* July 27 p 208
 Factory Illumination, Oct 19 p 861
 Factory Operations, Close Time Study of, Nov 9 p 1000
 Factory Work, Analysis of, Nov 16 p 1074
 Fan, Buffalo Conoidal,* Dec 28 p 1414
 Farrar & Trefts:
 Combines with the East Buffalo Iron Works, Dec 28 p 1397
 Farrell, James A.:
 Steel Corporation's Plans for Duluth, Sept 21 p 626
 Fay & Bierer:
 Heat Treatment of Low-Carbon Nickel Steels, July 27 p 195
 Fay & Scott:
 New Centering Machine and Lathe,* July 20 p 150
 Fay, Henry:
 Heat Treatment on Acid and Basic Open-Hearth Steel of Similar Composition, July 6 p 25
 Federal Control of Large Business, Nov 9 p 1016
 Federal Heater Company, July 13 p 110
 Feed:
 Black Revolving Steam,* Nov 9 p 1033
 Williams Warrior Sight,* Nov 9 p 1040
 Felt & Tarrant Mfg. Company:
 New Comptometer,* Sept 14 p 583
 Ferracute Machine Company:
 New Toggle Drawing Press,* July 20 p 164
 Shop System,* July 13 p 106
 Ferroalloys, Imports of Ferrosilicon and Other, Sept 7 p 523
 Ferromanganese, Molten, for Deoxidation, Oct 12 p 801
 Ferromanganese, Why It is Rising, Nov 30 p 1202
 Ferrosilicon and Other Ferroalloys, Imports of, Sept 7 p 523
 Ferrotitanium and Its Use, July 27 p 180; Oct 12 p 782
 File Trade, Sept 14 p 583
 Filter, New Burt Oil,* Oct 12 p 819
 Finished Products, Relative Tonnages of, Aug 10 p 296
 Finlay, Prof. J. R.:
 Michigan's Iron and Copper Mines, Aug 24 p 417
 Fire Equipment, Inspecting, Nov 16 p 1056
 Fire-Fighting System, Norton Factory,* Dec 21 p 1360
 Fire Protection in Factories, Aug 31 p 465
 Fires, Campaign Against Factory, July 20 p 128
 Firth, Arthur E.:
 Powder for Ready Plating of Metals,* July 20 p 165
 Fitch, John A.:
 Steel Works Labor Conditions, Oct 19 p 853
 Flameless Surface Combustion, Dec 7 p 1217
 Flask, New Kreutzberg Molder's,* Oct 5 p 767
 Flask, Thompson New Molding,* Dec 28 p 1415
 Flat-Top Fuel Company, Dec 14 p 1308
 Floors, Factory, Oct 12 p 799
 Flux, New Foundry, Sept 7 p 550
 Flywheel for Motor-Driven Rolling Mills, Sept 28 p 700
 Follansbee Brothers Company:
 Electrical Steel Sheets, Dec 21 p 1359
 Foos Gas Engine Company:
 Kerosene Engine Economy, July 6 p 5
 Foote-Burt Company:
 Multiple-Spindle Stay Bolt Drill,* Nov 23 p 1153
 New High-Duty Drill, July 20 p 163*; July 27 p 204
 Foreign Trade Balance:
 Our Improved, July 27 p 179
 Another Great, Nov 23 p 1121
 Forge, Hauck Changeable,* Nov 16 p 1089
 Foster, Walter H., Company:
 Hydro-Pneumatic Radial Drill,* July 27 p 206
 Founders' Association, National:
 Announcement of Meeting, Oct 12 p 783
 Convention Opening, Nov 16 p 1068
 Convention Proceedings,* Nov 23 p 1130
 Founders, British Handbook for Iron, July 13 p 96

Foundry:

And Mechanical School at Boston, New, Sept 28 p 699
 Drying Oven, Oct 19 p 864
 French & Hecht Mechanically Operated,* Oct 26 p 912
 Lifting Magnets in, July 13 p 92
 M. Rumely Company's,* Oct 26 p 906
 New Flux, Sept 7 p 550
 Pattern Handling in a Steel,* Aug 10 p 330
 Sly, W. W., Mfg. Company Equipment, Sept 7 p 546
 What It Thinks of the Machine Shop, Dec 21 p 1350
 Foundry Foremen, Philadelphia: Outing, Sept 21 p 611
 Meetings, Oct 19 p 864; Nov 23 p 1109
 Foundry Foremen's Association, American, Nov 9 p 1042
 Foundrymen, Prize Contest of Society of German, Nov 16 p 1094
 Foundrymen's Associations: Newark, Oct 12 p 819; Dec 21 p 1349
 Philadelphia, Sept 14 p 579; Oct 12 p 797; Nov 9 p 1042; Dec 14 p 1295
 Pittsburgh, Sept 21 p 625; Oct 26 p 898; Dec 7 p 1256
 Foundrymen's Convention at Buffalo in June, 1912, Dec 7 p 1259
 Fox 15-In. Lathe, Springfield,* Oct 5 p 747
 Freight Handling in Small Shipments, Nov 2 p 984
 Freight Handling with a Cleveland Gantry Crane,* Aug 31 p 467
 Freight Rates: Connellsville Coke Producers Demand Lower Rates, Sept 21 p 623
 Discrimination Alleged on Eastern Iron Ores, Sept 21 p 611
 Important Reductions, July 27 p 197
 Intermountain Railroad Rate Decision, Aug 3 p 235
 Iron Ore Rates from Lower Lake Ports, Nov 9 p 1033
 Lake Superior Ore Railroad Hearing, July 20 p 147
 Mahoning and Shenango Valley for Lower Rates, Nov 23 p 1124; Dec 21 p 1333
 Manufacturers Contest Advances, Nov 9 p 1003
 New Flat Rate on Coke, July 6 p 7
 New York's Barge Canal and Iron Ore, Aug 24 p 417
 Reductions from Buffalo, Aug 24 p 414
 Revolution in Claims, July 27 p 192
 Steel Makers Move for Lower Freight, Oct 19 p 834
 Steel Works Cases Before the Commerce Commission, Oct 5 p 736
 French & Hecht: Mechanically Operated Foundry,* Oct 26 p 912
 French Blast Furnace Consolidation, Sept 28 p 697
 French Iron Ore Production in 1910, Oct 26 p 904
 Friedrich Changeable Open-Hearth Furnace Port,* July 20 p 152
 Fritz Medal Presented to Sir W. H. White, Nov 23 p 1147
 Frontier Iron Works: Adds New Lines, Oct 19 p 853
 Eight-Cylinder Aero Motor,* Dec 7 p 1259
 Fueling Lighter, New,* Dec 14 p 1308
 Fuel Oil, Papers on, Aug 10 p 323
 Fuel Oil Specifications, Aug 3 p 261
 Furnace, Air, and Cupola Combined, Holland,* Sept 21 p 644
 Furnace, Jones Process for "Metallizing" Ore, Dec 14 p 1305
 Furnace, Tate-Jones New Oil Fired Flanging,* Dec 7 p 1243
 Furnaces, Blast: British and American Activity, Aug 17 p 348
 Development of Size, Sept 28 p 683
 First Tata Blown in India, Dec 7 p 1261
 French Consolidation, Sept 28 p 697
 Hamfelt Charging Car,* Nov 9 p 1039

Minnesota Steel Company, Aug 10 p 331
 Monthly Statement,* July 6 p 6; Aug 10 p 300; Sept 7 p 508; Oct 5 p 722; Nov 9 p 1004; Dec 7 p 1234
 New Bethlehem Almost Completed, July 7 p 33
 New Iroquois Iron Company,* July 6 p 30
 New Virginia Oriskany, Nov 23 p 1144
 Operation of Gas Engines, July 6 p 36
 Pittsburgh Steel Company's New, Dec 7 p 1239; Dec 21 p 1348
 Record at a Crane, Oct 26 p 887
 Republic No. 4 at Haselton, Ohio,* Dec 28 p 1402
 Slags in Concrete, July 13 p 90
 Statistics of Flux, Aug 17 p 349
 Thin-Lined Construction,* Dec 28 p 1400
 Unfit, July 13 p 72
 Uses of Gas, Oct 26 p 902
 Furnaces, Electric: Improvement in Induction Linings, Nov 30 p 1171
 Molybdenum Steel from the, Sept 21 p 641
 Multiple Replaceable Unit,* Aug 10 p 332
 Steel Castings from,* July 20 p 148
 Treadwell Steel Castings, Dec 21 p 1333
 Furnaces, Oil-Fired, MacLeod & Co., for Automobile Parts,* Nov 9 p 1036
 Furnaces, Open Hearth: Coke Oven Gas as a Fuel, Sept 7 p 538
 Friedrich Changeable Port,* July 20 p 152
 New Construction,* Oct 12 p 816
 Pure Irons from the, July 13 p 94
 Small, Sept 7 p 544
 Steel, In Great Britain, Aug 31 p 465
 Three Phoenix Notable, Nov 30 p 1203
 Two New Lackawanna, Dec 14 p 1295

G.

Gaco Specialties, Pittsburgh,* Sept 28 p 703
 Gandy Belting Company: New Feature of Belt, Sept 28 p 705
 Gardner Machine Company: Motor-Driven Disk Grinder,* Dec 14 p 1316
 Pattern Maker's Disk Grinder,* Aug 17 p 378
 Plant,* Dec 21 p 1357
 Ring Wheel Chuck,* Nov 16 p 1087
 Sample Book of Abrasive Disks, Aug 24 p 425
 Garrison, A., Foundry Company: Double-Crank Forging Press,* Sept 21 p 644
 Garvin Machine Company: Automatic Tappers,* Aug 24 p 431
 Plain Milling Machine,* July 13 p 105
 Two-Head Automatic Tapper,* Nov 23 p 1151
 Two Motor-Driven Grinders,* Aug 3 p 267
 Gary, Ind.: Largest By-Product Coke Oven Plant in the World, Dec 14 p 1311
 Oil Pump House,* July 27 p 203
 Sheet-Bar Mill,* July 13 p 102
 Gas and Gasoline Engine Trades Association, National: Convention, Dec 7 p 1233; Dec 14 p 1289
 Gas: Benzol from Coke-Oven,* Oct 5 p 756
 Coke Oven, as an Open-Hearth Fuel, Sept 7 p 538
 Coke Oven Engine Plant, 15,000-hp, Dec 21 p 1354
 Decision on Producer Operation, Oct 12 p 818
 Diffusing Noxious Chimney, Dec 21 p 1367
 Engine Wastes for Factory Heating,* July 27 p 208

High Pressure Distribution,* Oct 26 p 919
 International-Amet Oil Producer,* July 13 p 100
 New Standard Bituminous Producer,* Dec 14 p 1310
 Operation of Blast Furnace Engines, July 6 p 36
 Peine Revolving Grate Producer, Nov 9 p 1017
 Producer Investigations, Nov 30 p 1194
 Remarkable Discovery in Combustion,* Dec 7 p 1248
 Sampling and Analyzing, July 6 p 34
 Small Unit Producer Gas Engines, Nov 9 p 1001
 Uses of Blast Furnace, Oct 26 p 902
 Gasoline Engines, Knight,* Aug 10 p 328
 Gauge, American Steel Wire, Nov 16 p 1069
 Gayley, James: Sintering of Fine Iron-Bearing Materials,* Aug 24 p 422
 Gealy Wrench & Mfg. Company: New Pipe Wrench,* Dec 28 p 1411
 Gear: Gould & Eberhardt Hobber,* Nov 23 p 1147
 Herringbone,* Dec 21 p 1364
 Jenckes Valve,* Oct 12 p 810
 New James Model of O'Kelly Speed-Reducing, Aug 10 p 333
 New Standard Cutters,* Nov 2 p 983
 Gear Grinding Machine Company: Example of Good Machine Shop Lighting,* July 20 p 164
 Geisner, H. S.: Preparation of Brown Iron Ores, Sept 7 p 528
 General Briquetting Company: Briquetting, Flue Dust, Dec 14 p 1295
 General Electric Company: Air Compressor Sales, Nov 30 p 1194
 Battery Truck Crane,* Nov 30 p 1200
 Electric Generator of 30,000 hp, Nov 9 p 1021
 Electric Lamp Combination Dissolved, Oct 19 p 860
 General Refractories Company, Aug 10 p 323
 Generators, A Mammoth in Steam Power, Nov 9 p 1001
 Georgian Mfg. Company: Proposed Enlargements, July 20 p 143
 Germany: Accidents in Iron and Steel Works, Dec 14 p 1313
 Coke Oven Gas Engine Plant, 15,000-hp,* Dec 21 p 1354
 Deutscher Eisenhuettenleute's Meeting, Oct 12 p 802
 Friedrich Changeable Open-Hearth Furnace Port,* July 20 p 152
 Heavy Tools for Turbine Building,* Nov. 9 p 1030
 Industrial Policy as a Model, Aug 31 p 446
 Iron Market, July 6 p 17; July 20, p 139; July 27, p 189; Aug 10 p 309; Aug 17 p 360; Aug 24 p 409; Sept 7 p 518; Sept 14 p 573; Sept 21 p 620; Sept 28 p 673; Oct 5 p 733; Oct 12 p 791; Oct 19 p 846; Oct 26 p 895; Nov 2 p 946; Nov 9 p 1012; Nov 16 p 1065; Nov 23 p 1118; Nov 30 p 1180; Dec 7 p 1231; Dec 14 p 1285; Dec 21 p 1342; Dec 28 p 1393
 Kölner Bergwerks - Verein New Scheme for Storing Exhaust Steam, Aug 10 p 319
 Krupp Research and Chemical Laboratories, Aug 31 p 493
 Molten Ferromanganese for Deoxidation, Oct 12 p 801
 Open-Hearth Steel Works, Nov 9 p 1003
 Patent Law Practice, July 27 p 198
 Peine Steel Works Revolving Grate Gas Producer, Nov 9 p 1017
 Pig Iron Production First Half 1911, Aug 3 p 266

- Prosperous Conditions, Nov 23 p 1107
Prize Contest of Society of German Foundrymen, Nov 16 p 1094
Schmitz, August, Wire Flattening Mill,* Dec 12 p 1362
Softening Water on a Large Scale, July 27 p 202
Steel Plant Construction, Nov 9 p 1002
Globe Iron Works:
To Remove Its Plant, Sept 28 p 699
Goodman, Maurice:
Chatillon, Commentry & Neuves-Maisons French Steel, Dec 14 p 1305
Golden-Anderson Valve Specialty Company:
Electrically Operated Stop Valve,* Aug 10 p 335
Gould & Eberhardt:
Bevel Gear Roughing Shaper,* July 27 p 205
Gear Hobber with New Drive,* Nov 23 p 1147
New Hobbing Attachment,* Aug 31 p 477
Goulds Mfg. Company:
Air Cylinders for the Pyramid Pumps,* Aug 3 p 270
Motor-Driven Mine Pump,* Oct 12 p 811
New Centrifugal Pumps,* Aug 24 p 427
Pumps of Exceptional Capacity, Dec 7 p 1261
Triplex Pump,* Sept 7 p 546
Government Control of Large Corporations, Dec 7 p 1236
Government Interference with Business, Is It Culminating? Sept 21 p 608
Government to Business, To Discuss Relation of, Oct 20 p 900
Grab Buckets, Andresen-Evans Type B,* Sept 7 p 549
Graham, Walter:
Southwestern Virginia Ore Development, Sept 28 p 681
Grant Mfg. & Machine Company:
Motor-Driven Ceiling Riveter,* Nov 2 p 983
Graphite, Production of, in 1910, Aug 31 p 477
Great Britain:
American and German Steel Displaces Welsh Workers, Aug 31 p 471
Frodair Iron & Steel Company's Handbook for Iron Founders, July 13 p 96
Increasing Cost of Workmen's Compensation, Nov 23 p 1107
Iron and Steel Exports and Imports, Aug 24 p 421
Iron and Steel Exports Stationary, Aug 3 p 235
Iron and Steel Market, Aug 3 p 266; Sept 21 p 624; Nov 23 p 1121
Move to Reduce Steel Imports, Oct 12 p 794
Open-Hearth Steel Furnaces, Aug 31 p 465
Rebate Plan in the Steel Trade, Dec 14 p 1277
Scotch Bar Iron Combination, Sept 7 p 507
Scottish Tube Works Consolidation, Aug 10 p 317
Stock Process for Steel Castings,* Sept 7 p 524
Wage Earners, Nov 2 p 951
Great Northern Iron Ore Lease:
All the Details, Oct 19 p 854
Cancellation of, Oct 26 p 884 and p 901
Greaves, Klusman & Co.:
Heavy 15-In. Engine Lathe,* Aug 31 p 488
Green Fuel Economizer Company:
Temperature Pendants, Nov 9 p 1042
Grinding Machines:
Besly Disk,* Oct 19 p 862
Besly Ring Grinding Wheel Chuck,* July 20 p 165
Bridgeport Combination,* July 6 p 59
Gardner Motor-Driven Disk,* Dec 14 p 1316
Gardner Pattern Maker's Disk,* Aug 17 p 378
Garvin Motor-Driven Hole,* July 27 p 214
Ingersoll Cutter,* Aug 31 p 468
Landis Integral Cam Grinding Attachment,* July 20 p 150
Miami Improved Tool and Cutter,* July 13 p 105
New Challenge Combination,* July 27 p 212
New Hisey-Wolf Parallel,* July 13 p 110
Newton, for Planer Cutters,* Aug 10 p 327
Norton Axle,* Nov 23 p 1148
Ransom Guard,* Nov 2 p 982
Ransom Portable,* Nov 9 p 1038
Safety as Applied to, July 20 p 140
Safety Devices for, Aug 17 p 349
Two Motor Driven Garvin,* Aug 3 p 267
Willey Motor-Driven Lathe Center, Nov 2 p 969
Guy Clamp, Matthews Boltless,* Aug 10 p 760
- ### H.
- Hadfield, Sir Robert A.:
Progress of Metallurgy, Sept 14 p 580
Hagan, George J.:
Sheet and Pair Furnace Contracts, Oct 19 p 857
Hamfelt, George K.:
Blast Furnace Charging Car,* Nov 9 p 1039
Hamilton Machine Tool Company:
Relieving Device Integral with Lathe,* Nov 23 p 1154
Hammers:
Langelier,* Sept 28 p 692
New Allen Riveter,* Oct 26 p 917
Oldham Riveting,* Nov 2 p 985
Hancock, E. L.:
Strength of Steel from Structural Shapes,* July 20 p 156
Hanford & Barkley:
Correction, Sept 14 p 593
Hanger, Thompson Automatic Cut-Out,* Aug 17 p 388
Hanna Engineering Works:
Electric Riddle Oscillator,* Sept 21 p 638
Hanna, Leonard C.:
Testimony at Steel Investigation, Aug 3 p 259
Hanna, M. A., & Co.:
Atlas Ore Dryer, Sept 28 p 682
Harbison-Walker Refractories Company:
Annual Report, Nov 30 p 1188
Harding, H. McL.:
Cargo Transference at Steamship Terminals, Nov 23 p 1151
Harriman Lines:
Employees Demand Control of Shops, Aug 31 p 466
Harrison Safety Boiler Works:
Notable Departure in Relief Valves,* Nov 16 p 1085
Hartness, James:
Turret Equatorial Telescope,* Dec 21 p 1368
Hatch, Leonard W.:
Laws for Accident Prevention, Aug 24 p 421
Hauck Mfg. Company:
Changeable Forge,* Nov 16 p 1089
Heald Machine Company:
Good Business, Sept 14 p 596
Health of Employees, Oct 5 p 719
Heating, Gas Engine Wastes for Factory,* July 27 p 208
Heat Treatment:
Acid and Basic Steel of Similar Composition, July 6 p 25
Low-Carbon Nickel Steels, July 27 p 195
Paper by James H. Herron,* Nov 23 p 1140
Steel Axles, Nov 9 p 1005
Heckscher, August:
Suit Over a Southern Iron Company Promotion, Oct 26 p 911
Heely Tube Spreader Company:
Boiler Tools,* Aug 24 p 432
Heppenstall Forge & Knife Company:
Improvements, July 20 p 129
Herringbone Gears,* Dec 21 p 1364
Herron, James H.:
Heat Treatment of Steel,* Nov 23 p 1140
Hersey & Job:
Study of Steel Tires,* July 20 p 154
High-Voltage Apparatus, Reaction from, Oct 26 p 886
Hill Iron Ore Lease, Full Details of, Oct 19 p 854
Cancellation of, Oct 26 p 884 and p 901
Hill, M. B., Mfg. Company:
Face Plate Dog,* Aug 17 p 383
Hisey-Wolf Machine Company:
Drill Converting Attachment,* Nov 2 p 985
Gas Engine Wastes for Factory Heating,* July 27 p 208
New Parallel Grinder,* July 13 p 110
Portable Electric Bench Drill,* Oct 19 p 866
Hobber with New Drive, Gould & Eberhardt Gear,* Nov 23 p 1147
Hobbing Attachment, New Gould & Eberhardt,* Aug 31 p 477
Holder, Text Book and Blue Print,* Sept 14 p 591
Holland-Domschke Foundry Company:
Cupola and Air Furnace Combined,* Sept 21 p 644
Holt Mfg. Company:
Caterpillar Traction Engine,* Aug 10 p 334
Holzhüter, E.:
Weiss Briquetting Process for Ores and Flue Dust, Nov 30 p 1185
Hooper, George K.:
Core Room Conveyor System,* July 27 p 217
Hopkins & Allen Arms Company, Aug 24 p 421; Aug 31 p 448
Horseshoe and Wire Pool Cases, Aug 10 p 323
Hose and Tubing, American Flexible Metal, Dec 28 p 1415
Hesse, Corona Flexible Metallic,* July 27 p 221
Hours and Wages in the Iron Industry, Aug 10 p 336
Howard, James E.:
Broken Lehigh Valley Rail, Nov 23 p 1126
Hoyme, C. R.:
Motor Trucks, Dec 14 p 1314
Hudson & Manhattan Railroad Company:
Forced Blast Unit, 500-hp., Nov 30 p 1200
Hughes, Charles H.:
Forced Blast Unit, 500-hp.,* Nov 30 p 1200
Mechanical Equipment of the New York Central Terminal, Sept 14 p 593
Hulbert, William R.:
Ferrotitanium and Its Use, Oct 12 p 782
Hunter, John A.:
Efficiency in Boiler Plant Operation, Aug 17 p 368
Hunt, Robert W.:
First Steel Rails Rolled at Johnstown, Nov 9 p 1002
Hunt, Robert W., & Co.:
Rail Branding and Heat Number Stamping, Oct 19 p 849
Hupp Motor Car Company:
New Plant for Windsor, Canada, Oct 12 p 802
Hyatt Roller Bearing Company:
Engineering Data, Dec 21 p 1353
Hydrogen and Oxygen, Generating Electrolytically,* Aug 17 p 386; Aug 31 p 491

I.

Ideal Chaplet Works:
McCarroll Ideal Chaplet,* July 27 p 221

Illinois Steel Company:
Operations, Aug 3 p 261
Screw Spikes, Sept 14 p 578
South Chicago Rail Mill Not Closed, Dec 14 p 1277

Illumination:
Factory, Oct 19 p 861
Steel Mill, Oct 5 p 737

Implement and Vehicle Association, National:
Convention, Oct 19 p 851

Imports and Exports of Iron and Steel, May, July 6 p 34; June, Aug 10 p 317; July, Sept 7 p 506; August, Oct 12 p 809; September, Nov 9 p 1021; October, Dec 7 p 1219

Imports of Ferrosilicon and Other Ferroalloys, Sept 7 p 523

India:
American Engineers for the New Steel Works in, Sept 21 p 623
First Tata Furnace Blown in, Dec 7 p 1261
Iron and Steel Industry in, Sept 28 p 682

Indiana Steel Company:
Electrical Equipment of Gary Coke Plant,* Dec 28 p 1406
Largest By-Product Coke Oven Plant in the World, Dec 14 p 1311
Sheet-Bar Mill,* July 13 p 102
Oil Pump House,* July 27 p 203

Indictments of Business Men, Wholesale, July 6 p 4

Industrial Education, Cincinnati Meeting for Promotion of, Oct 26 p 887

Industrial Education Convention, Nov 9 p 1020

Industrial Lighting, Aug 3 p 281

Ingersoll Milling Machine Company:
Cutter Grinder,* Aug 31 p 468

Ingot Molds of Steel, Oct 26 p 904

Ingram-Richardson Mfg. Company:
Improvements, July 20 p 142

Inland Steel Company:
Annual Report, Aug 3 p 251
Bolt and Rivet Works,* Sept 28 p 684
Handbook on Steel Products, Nov 23 p 1125
Twisting of Reinforcing Bars,* Sept 21 p 641
Vismara Steel Sheets, Aug 3 p 248

Insurance Against Strikes, Oct 5 p 719

Insurance, Excluding Private Liability, Oct 26 p 885

Interest Charges and Profit,* Aug 24 p 426

International-Amet Gas Power Company:
Oil Gas Producer,* July 13 p 100

International Association for Testing Materials:
Sixth Congress Committees, Sept 28 p 665

International Congress on Chemistry in 1912, Oct 26 p 904

International Exposition of Inventions, Aug 3 p 251

International Motor Company, Oct 26 p 915

International Oxygen Company:
Generating Oxygen and Hydrogen Electrolytically, Aug 17 p 386*;
Aug 31 p 491

International Railway General Foremen's Associations:
Convention, Aug 3 p 284

International, Schedule of the, July 27 p 218

International Steel Conference, July 13 p 74; July 20 p 144; Aug 3 p 252

Interstate Commerce Commission, Steel Works Cases Before, Oct 5 p 736

Inventions, International Exposition of, Aug 3 p 251

Iron and Steel, Census Bureau's Report on, Aug 31 p 470

Iron and Steel Institute:
Programme for Turin Meeting, July 27 p 202
Turin Meeting. Abandoned, Oct 5 p 751

Iron and Steel Institute, American:
Special Meeting, Oct 19 p 861

Iron-Bearing Materials, Sintering of Fine,* Aug 24 p 422

Iron-Making Nations, Great, Dec 14 p 1296

Iron Mines Suit, Croton Magnetic, Aug 24 p 418

Iron Mines, Taxable Valuation of Michigan, Nov 9 p 1028

Iron Ore:
(Also see Lake Superior Ore)
Chinese Exports of Pig Iron and, Sept 28 p 700
Eastern Rate Discrimination Alleged on, Sept 21 p 611
East Texas Developments, July 27 p 197
French Production in 1910, Oct 26 p 904
Great Northern Lease, Oct 19 p 854
Imports of Swedish, Oct 26 p 887
Minnesota Valuations, Nov 2 p 937
New 24-Hour Record in Unloading, Aug 24 p 416
Preparation of Brown, Sept 7 p 528
Production in 1910, Aug 24 p 420
Sintering of Mayari Ores in Cuba,* Sept 14 p 586
Some Fallacies, Nov 9 p 1000
To Concentrate Moose Mountain, Nov 30 p 1183

Iron Sands, Titaniferous, Sept 7 p 537

Irons from the Open-Hearth Furnace, Pure, July 13 p 94

Iron, Wrought, and Re-rolled Steel, Spheres of, Nov 30 p 1168

Iron, Wrought, Production of, Dec 7 p 1218

Iron, Wrought, Versus Steel Pipe, Nov 30 p 1188

Iroquois Iron Company:
New Blast Furnaces,* July 6 p 30
Notable Air Compressor Installation,* Sept 7 p 536

Isthmian Canal Commission Bids, Nov 17 p 1069; Nov 23 p 1146

Italy:
Another Steel Combination, Aug 10 p 323
Iron and Steel Production in 1910, Oct 5 p 763
Iron and Steel Trust in, Sept 28 p 701

Irrington Mfg. Company:
High-Grade Small Tools in Demand, Dec 14 p 1289

J.

Jacks:
Duff Ball-Bearing Journal,* Sept 14 p 597
New Canton Geared Ratchet Lifting,* July 6 p 43

James, D. O., Mfg. Company:
New Model of O'Kelly Speed-Reducing Gear,* Aug 10 p 333

Janney, Steinmetz & Co.:
Business, Sept 28 p 699

Japan:
Nippon Steel Works, July 27 p 181
Pig Iron Production, Nov 2 p 982

Jeanesville Iron Works Company:
Pumps Used in Uncovering the Maine,* Aug 17 p 374

Jefferson Union Company:
New Union Tee,* July 2 p 206

Jeffrey Mfg. Company:
Single Roll Coal Crusher,* Dec 7 p 1251

Jenckes, J. M.:
Valve Gear,* Oct 12 p 810

Job & Hersey:
Study of Steel Tires,* July 20 p 154

Job Handling System, Triumph,* Sept 21 p 638

Job, Robert:
Broken Lehigh Valley Rail,* Oct 12 p 800

Jones, John T.:
Process for "Metallizing" Ore, Dec 14 p 1305

Jones & Laughlin Steel Company:
Increased Operations at Aliquippa, Dec 14 p 1288

Judicial Decisions of Interest to Manufacturers, July 27 p 201; Aug 10 p 345; Aug 17 p 397; Aug 31 p 466; Sept 21 p 647; Oct 19 p 872; Nov 16 p 1093; Dec 21 p 1348

K.

Keen, William H.:
Acid and Basic Open-Hearth Steel, Aug 10 p 324

Kentucky Iron History, Sept 7 p 543

Kentucky Mill Dismantled, Historic, July 27 p 199

Kerr Turbine Company:
Sales, Nov 30 p 1184

Keystone Mfg. Company:
Insert Chuck Jaws,* Oct 5 p 750

Kidder, R. E.:
Boring Machine,* Dec 7 p 1257

Kirchhoff, C.:
American Ironmasters Safeguarding Their Men, Nov 16 p 1082

Kirner, Dr. J.:
Observations on Case Hardening,* July 27 p 213

Knight Gasoline Engine,* Aug 10 p 328

Knox Pressed & Welded Steel Company:
Announcement, Nov 16 p 1087

Steel Men Inspect Devices, Sept 28 p 683

Koppers, H.:
Largest By-Product Coke Oven Plant in the World, Dec 14 p 1311

Kreutzberg, L. J.:
New Molder's Flask,* Oct 5 p 767

Krupp, Fried.:
Armor Plate Decision, Oct 19 p 837
Research and Chemical Laboratories, Aug 31 p 493

L.

La Belle Iron Works:
Annual Report, Sept 21 p 643

Labor:
Accidents in German Iron and Steel Works, Dec 14 p 1313
American Association for Labor Legislation, Sept 7 p 507; Dec 21 p 1359
Analysis of Factory Work, Nov 16 p 1074
And Lower Prices for Commodities, Sept 7 p 504; Sept 14 p 564
And the Efficiency System, Aug 31 p 447
Another Plan for Stock-Ownning by Employees, Aug 17 p 388
Any Readjustment Will Include, Aug 24 p 401
Bonus System Man and His Foreman, Oct 26 p 885
British Wage Earners, Nov 2 p 951
Close Time Study of Factory Operations, Nov 9 p 1000
Coming Meeting of American Association for Labor Legislation, Sept 7 p 507
Credit Unions for Employees, July 27 p 215
Efficiency in Government Shops, Dec 28 p 1384
Employees Demand Control of Harri-man Lines Shops, Aug 31 p 466
Excluding Private Liability Insurance, Oct 26 p 885
Health of Employees, Oct 5 p 719
Hours and Wages in the Iron Industry, Aug 10 p 336
House Passes an Eight-Hour Bill, Dec 21 p 1348
Idle Hours in Machine Shops, Dec 28 p 1384
Increasing Cost of Workmen's Compensation, Nov 23 p 1107
Industrial Campaign Against Sickness, Aug 10 p 297

- Insurance Against Strikes, Oct 5 p 719
In the Iron and Steel Industry, Nov 23 p 1138
Investigation by Steel Corporation, Oct 26 p 914
Keeping Down Idle, Nov 2 p 935
Laws for Accident Prevention, Aug 24 p 421
Los Angeles Confessions, Dec 7 p 1216
Machinists' Strike Benefits, Oct 26 p 898
Norton Company's Medical Department,* Dec 7 p 1244
Piece-Rate Cutting, Sept 14 p 563
Proposed Federal Compensation Bill, Dec 14 p 1316
Safeguarding Workmen in Small Plants, July 13 p 74
Safety Devices for Grinding Wheels, Aug 17 p 349
Scientific Management in Government Shops, Dec 14 p 1276
Sheet and Tin Plate Scale, July 6 p 42
Sherman Act and the Labor Trust, Nov 2 p 950
Sick Benefits and Society Physicians, Dec 7 p 1217
Steel Corporation Bonuses to Employees, Dec 28 p 1385
Steel Mill and Hot Weather, July 20 p 126
Steel Works Conditions, Oct 19 p 853
Time Study Observations,* Nov 16 p 1090
Union View of Lifting Magnets, Aug 31 p 466
Unusual Service Records in Spencer Wire Works, Sept 28 p 693
Use of Intoxicants by Steel Workers, Dec 14 p 1277
Wage Scale Settlements, July 6 p 2
Women in the Metal Trades, Nov 30 p 1189
Workmen's Foolish Investments, July 13 p 73
Labor Notes, Aug 10 p 318; Sept 14 p 577; Oct 5 p 723; Nov 23 p 1125; Dec 7 p 1237
Chemical, Aug 31 p 493
Lackawanna Steel Company:
Earnings, Oct 19 p 851
New Merchant Mill,* Sept 28 p 690
Two New Open-Hearth Furnaces, Dec 14 p 1295
Lagonda Mfg. Company:
Automatic Cut-Off Valve,* Sept 21 p 640
Large Strainers,* Sept 14 p 592
Laidlaw-Dunn-Gordon Company:
High-Pressure Gas Distribution,* Oct 26 p 919
Lake, E. F.:
Alloys Used for Die-Castings, Sept 7 p 532
Lake Shore & Michigan Southern Railroad:
Handling Freight with a Gantry Crane,* Aug 31 p 467
Lake Superior & Ishpeming Railway Company:
New Concrete-Steel Ore Dock,* Nov 9 p 1041
Lake Superior Iron & Chemical Company, Oct 19 p 858
Lake Superior Mining Institute:
Convention Programme, Aug 10 p 301
Proceedings, Aug 31 p 462
Lake Superior Ore:
Electrification at Mines, Sept 14 p 562
First Mesaba Range Steam Shovel, Sept 28 p 697
Mining News, July 13 p 98; Aug 3 p 264
Minnesota Iron Ore Valuations, Nov 2 p 937
New 24-Hour Record in Unloading, Aug 24 p 416
New Concrete-Steel Ore Dock,* Nov 9 p 1041
New Finds of Lake Iron Ores, Sept 28 p 702
Property Values Keep Up, Aug 31 p 492
Railroad Hearing, July 20 p 147
Rates from Lower Lake Ports, Nov 9 p 1033
Shipments in May, July 13 p 85
Shipments in July, Aug 10 p 312
Shipments in August, Sept 14 p 578
Shipments in September, Oct 12 p 803
Shipments in October, Nov 16 p 1073
Shipments in 1911, Dec 7 p 1221
Taxable Valuation of Michigan Iron Mines, Nov 9 p 1028
Turbo-Electric Hoisting Engines in Lake Mines, Sept 28 p 664
Lamps:
Book on Arc Operation, July 6 p 42
Electric Combination Dissolved, Oct 19 p 860
Hangers for Mill Lights, Oct 19 p 860
Landis Machine Company:
New Threading Machine,* Aug 3 p 280
Landis Tool Company:
Integral Cam Grinding Attachment,* July 20 p 150
Langelier Mfg. Company:
Combination Saw and Drill,* Dec 7 p 1254
Hammering Machine,* Sept 28 p 692
Semi-Automatic Rivet Drilling Machine,* July 20 p 155
Special Drill,* Aug 17 p 382
Langrehr Safety Can for Gasoline,* Oct 19 p 866
Lathes:
Bradford Relieving Attachment,* Aug 31 p 474
Greaves-Klusman Heavy 15-In. Engine,* Aug 31 p 488
Hamilton Relieving Device Integral with,* Nov 23 p 1154
Hill Face Plate Dog,* Aug 17 p 383
Miami 14-In.,* Nov 2 p 982
Morris 16-In.,* Nov 2 p 976
New Fay & Scott,* July 20 p 150
Seneca Falls Relieving Attachment,* Nov 30 p 1204
Springfield Fox 15-In.,* Oct 5 p 747
Willey Motor-Driven Center Grinder,* Nov 2 p 969
Law, Merrett and Pollard:
Welds by Different Methods, July 27 p 200
Lead in 1910, Production of, Dec 7 p 1256
Lea Recorder, Yarnall-Waring,* Dec 28 p 1404
Lebanon Valley Iron & Steel Company, July 28 p 181
Le Blond, R. K., Machine Tool Company:
Combination Miller,* Nov 16 p 1094
Ledyard, Lewis C.:
Testimony at Steel Investigation, Aug 3 p 259
Lees, G. E.:
Production of Alloyed Steels in 1910, Oct 19 p 836
Lehigh Valley Railroad:
Broken Rail,* Oct 12 p 800
Interstate Commerce Commission's Report on Broken Rail, Nov 23 p 1126
Lentz, Hugo:
Poppet Valve Engine,* July 6 p 54
Lewis Foundry & Machine Company:
Contracts, July 6 p 4
Lidgerwood Mfg. Company:
Panama Canal Cableways,* Oct 12 p 812
Lighter, New Fueling,* Dec 14 p 1308
Lighting:
Example of Good Machine Shop,* July 20 p 164
Improved Pyle-National Contractor's,* Dec 14 p 1309
Industrial, Aug 3 p 281
Lamp Hangers for Mill, Oct 19 p 860
Lime Light on Factory, Oct 12 p 781
Lignites and the Use of Producer Gas in Texas, Sept 28 p 676
Lilienberg, N.:
Labor and Lower Prices for Commodities, Sept 14 p 564
Littlefield, F. H.:
Great Trade School at St. Louis, Dec 7 p 1252
Little Giant Serial Taps,* Oct 19 p 868
Little, James E.:
Sintering of Mayari Iron Ores in Cuba,* Sept 14 p 586
Locomotives:
Huge Pennsylvania, Dec 28 p 1397
On Ore Railroads, Mallet Articulated, July 13 p 97
Terre Haute Electric Switching,* Sept 28 p 694
To Tow Ships Through Panama Canal, Oct 26 p 903
Lodge & Shipley Machine Tool Company:
Office Lunching Plan, Nov 23 p 1109
Shop System for Greater Output,* Aug 3 p 268
Loggie, George W.:
Aligning of Shafting,* Oct 12 p 814
Long Island Railroad Company:
All-Steel Passenger Cars, Oct 26 p 898
Loss to Profit, Transmission from, July 27 p 218
Louisville Steel & Iron Company, Oct 19 p 869
Lovejoy, A. H.:
Toncan Metal, July 6 p 59
Lubrication of Queen City Shaper,* Oct 26 p 918
Lubrication, Richardson-Phenix Engine,* Dec 14 p 1317
Lumen Bearing Company:
Expands, Dec 14 p 1297
Lunching Plan, Office, Nov 23 p 1109
M.
Macgregor, Walter:
Small Open Hearth Furnaces, Sept 7 p 544
MacLeod & Co.:
Oil Fired Furnaces for Automobile Parts,* Nov 9 p 1036
McClintic-Marshall Construction Company:
Engineers Inspect Panama Canal Gates, July 20 p 129
McClintock, A. E.:
Machine Molding for Large Castings,* Dec 28 p 1412
McDougall, John, Caledonian Iron Works Company, Ltd.:
Minimizing Peak Electric Loads,* Aug 24 p 430
McGlynn, William P.:
New Wire and Rod Machines,* Nov 16 p 1082
McGowan Company, John H.:
Duplex Pump,* Oct 19 p 867
McMyler Interstate Company:
Shipbuilding Crane,* 35-Ton, Nov 16 p 1092
McNamara Brothers' Confessions, Dec 7 p 1216
McWilliam & Barnes:
Experiments on 0.2 Per Cent. Vanadium Steel, July 27 p 205
Nickel Steel, 3 Per Cent., Aug. 10 p 326
Machinery:
Demand for Second-Hand, Dec 21 p 1332
Labor Agitation and Railroad Purchases, Oct 5 p 720
Misrepresenting Deliveries, Sept 28 p 663
Motion Pictures for Selling, Aug 31 p 464
Selling American in Europe, Aug 3 p 262
Standards of Safety in Relation to,* July 13 p 88; July 20 p 160
Machines Earn Their Living, Making, July 27 p 194
Machine Shops, Idle Hours in, Dec 28 p 1384
Machine Shops of Rumely Tractor Works,* Nov 2 p 970
Machine Shop, What the Foundry Thinks of the, Dec 21 p 1350
Machine Tool Builders:
Convention Programme, Sept 28 p 700
Official List of, Aug 10 p 335
Proceedings, Oct 12 p 796

- Machine Tool Dealers' Meeting, Oct 19 p 857
- Machine Tools:
Coming Demand for, Dec 14 p 1275
Selling American in Europe, July 6 p 40
- Machinists' Strike Benefits, Oct 26 p 898
- Mackintosh, Hemphill & Co.:
Interesting Engine Order, Nov 30 p 1184
- Magnets:
In Foundries, July 13 p 92
Labor Union View of, Aug 31 p 466
- Mahoning and Shenango Valley Manufacturers for Lower Freight Rates, Nov 23 p 1124
- Maine, Uncovering the,* Aug 17 p 374
- Mallet Articulated Locomotives on Ore Railroads, July 13 p 97
- Management in Government Shops, Scientific, Dec 14 p 1276
- Management, Organizer of Men in, Nov 2 p 958
- Manganese Ores, Production of, Nov 30 p 1187
- Manila Times, July 13 p 97
- Manning, Maxwell & Moore, Inc.:
Changes, July 27 p 180
- Manufacturers Contest Freight Advances, Nov 9 p 1003
- Manufacturers, National Association of:
Sherman Act and the Labor Trust, Nov 2 p 950
- Marking Machine, Remington,* Aug 17 p 383
- Massillon Bridge & Structural Company:
New Structural Shop, Dec 14 p 1311
- Matthews Gravity Carrier Company:
Will Move to Ellwood City, Pa., Oct 19 p 865
- Matthews, H. A., Mfg. Company:
Waterbury Large Double-Acting Cam Press,* Oct 12 p 807
- Matthews, W. N., & Bro.:
Boltless Guy Clamp,* Oct 5 p 760
- Mayari Iron Ores in Cuba, Sintering of,* Sept 14 p 586
- Maynard, George W.:
Dwight & Lloyd Ore Sintering Process, Dec 21 p 1349
- Measurement Tools, New Brown & Sharpe,* Dec 7 p 1246
- Mechanical Engineers, American Society of:
Annual Meeting, Nov 16 p 1089
Convention Programme, Nov 30 p 1171
Proceedings, Dec 7 p 1219; Dec 14 p 1290
Standard Boiler Rules, Sept 7 p 521
- Mechanical Plant Auxiliaries on Fourth Floor of Lofty Building, Aug 3 p 261
- Medal Presented to Sir W. H. White, Fritz, Nov 23 p 1147
- Medical Department of the Norton Company,* Dec 7 p 1244
- Meek, Charles E.:
Fire Protection in Factories, Aug 31 p 465
- Merrell Mfg. Company:
Portable Pipe Machine,* July 6 p 59
- Merton, Henry R., & Co., Ltd.:
Why the European Copper Market Advances, Dec 28 p 1385
- Mesaba Range Steam Shovel, First, Sept 28 p 607
- Mesta Machine Company:
Large Corliss Engine Built in Sixteen Days,* Dec 7 p 1257
Record in Building Rolling Mill Equipment, Oct 5 p 761
Shipments, July 13 p 123
- Metal Corrosion in Gaseous Atmosphere, Aug 31 p 461
- Metallurgy, Progress of, Sept 14 p 580
- Metal Manufacturers' Association, Philadelphia:
Annual Meeting, Dec 28 p 1401
- Metal Trades Dinner, Cincinnati, Dec 14 p 1295
- Meter Installations, Two Thomas, Aug 31 p 464
- Mexico:
Mammoth Potrero Gusher, Aug 3 p 258
- Miami Valley Machine Tool Company:
Improved Tool and Cutter Grinder,* July 13, p 105
Lathe, 14-in.,* Nov 2 p 982
- Michigan Corporate Excess Tax, Proposed, Dec 21 p 1333
- Michigan's Iron and Copper Mines, Aug 24 p 417
- Michigan Iron Mines, Taxable Valuation of, Nov 9 p 1028
- Michigan Steel Company, Oct 19 p 860
- Micrometers, New Brown & Sharpe, Dec 7 p 1246
- Middle West, Future Development of the, Nov 30 p 1186
- Midvale Steel Company:
Armor Plate Decision, Oct 19 p 837
- Mill Illumination, Steel, Oct 5 p 737
- Milling Machines:
Garvin Plain,* July 13 p 105
Le Blond Combination,* Nov 16 p 1094
New Newton Brace,* Aug 10 p 336
Newton Combination Portable Boring, Drilling and,* Aug 10 p 331
New Waltham Thread,* Nov 30 p 1194
- Milwaukee Industrial Exposition, Sept 14 p 579
- Mines, Bureau of:
Demonstrations, Sept 28 p 705
Producer Gas Investigations, Nov 30 p 1194
- Mines:
Croton Suit, Aug 24 p 418
Michigan's Iron and Copper, Aug 24 p 417
Ore Loading at El Cuero,* Oct 5 p 752
Taxable Valuation of Michigan Iron, Nov 9 p 1028
- Minimizing Peak Electric Loads,* Aug 24 p 430
- Mining Engineers, American Institute of:
Announcement of Meeting, Sept 21 p 639
Excursion Features of San Francisco Meeting, Sept 28 p 677
Meeting of New York Section, Sept 28, p 682
- Mining Institute, Lake Superior:
Convention, Aug 31 p 462
- Minnesota Iron Ore Valuations, Nov 2 p 937
- Minnesota Steel Company:
Blast Furnaces, Aug 10 p 331
New Steel Plant at Duluth,* Nov 30 p 1196
Steel Corporation's Plans for, Sept 21 p 626
- Mitchell, R. C.:
New Internal Combustion Engine,* Oct 12 p 820
- Mixers, Pig Iron, Aug 3 p 265
- Molder's Bench, Sand Mixing Portable,* Dec 21 p 1367
- Molder's Flask, New Kreutzberg,* Oct 5 p 767
- Molder's Flask, Thompson New,* Dec 28 p 1415
- Molders' Safeguards, Nov 23 p 1108
- Molding Machines:
Murphy Duplex Jarring Machine,* Dec 7 p 1259
Osborn Drop Plate Squeezer,* Oct 12, p 803
Patent Decision, Dec 14 p 1276
Pridmore Power Squeezing Attachment,* Nov 9 p 1035
William Sellers, for Large Castings,* Dec 28 p 1412
- Molds of Steel, Ingot, Oct 26 p 904
- Mold Sprayer, Murphy,* Dec 14 p 1316
- Moll, William:
Steam Trap for Heating Plants,* July 6 p 53
- Molybdenum Steel from the Electric Furnace, Sept 21 p 641
- Monterey Iron & Steel Company:
Annual Report, Oct 5 p 721
- Moose Mountain, Ltd.:
To Concentrate Ores, Nov 30 p 1183
- Morgan Construction Company:
New Mills for Steel Company of Canada, Dec 14 p 1298
- Morgan Engineering Company:
To Drain an Arkansas Swamp, Dec 28 p 1303
- Morgan Spring Company:
Eclipse Pipe Hangers,* Dec 7 p 1256
- Morgantown, W. Va., Seeks Additional Industries, Nov. 2 p 957
- Morris, John B., Machine Tool Company:
Lathe,* 16-in., Nov 2 p 976
- Motion Picture Company
Motion Pictures for Selling Machinery, Aug 31 p 464
- Motor Driving for Planers,* Oct 26 p 914
- Motors:
Frontier Eight-Cylinder Aero,* Dec 7 p 1259
New Westinghouse Direct Current,* Aug 17 p 375
Wagner New Single Phase Electric,* Nov 16 p 1080
- Motor Trucks, Dec 14 p 1314
- Motor Wagon Display in New York, Nov 23 p 1153
- Mount Union Refractories Company:
New Fire Brick Enterprise, Oct 12 p 820
- Multiple Unit Electric Company:
Replaceable Unit Electric Furnace,* Aug 10 p 332
- Mumford, E. H., Company:
Molding Machine Patent Decision, Dec 14 p 1276
- Municipal Building, Mechanical Plant Auxiliaries on Fourth Floor, Aug 3 p 261
- Munzel, K.:
Revolving Grate Gas Producer, Nov 9 p 1017
- Murphy, James A.:
Duplex Jarring Machine,* Dec 7 p 1259
- Mold Sprayer,* Dec 14 p 1316
- Museum of Safety, American:
Molders' Safeguards, Nov 23 p 1108

N.

- National-Acme Mfg. Company:
Effective Advertising Device, Dec 21 p 1353
Improved Spring Die,* Nov 30 p 1204
- National Association of Brass Manufacturers:
Meeting, July 6 p 34
- National Brake & Electric Company:
Notable Air Compressor Installation,* Sept 7 p 536
Routing Material Through Shop Departments,* Nov 30 p 1192
- National Bridge Company of Canada, Aug 31 p 463
- National Carbon Company:
Practical Operation of Arc Lamps, July 6 p 42
- National Electric Lamp Association:
Electric Lamp Trade, Sept 14 p 597
- National Enameling & Stamping Company:
Annual Report, Sept 7 p 545
- National Founders' Association:
Announcement of Meeting, Oct 12 p 783
Opening Features, Nov 16 p 1068
Proceedings,* Nov 23 p 1130
- National Gas and Gasoline Engine Trades Association:
Convention, Dec 7 p 1233; Dec 14 p 1289
- National Implement and Vehicle Association:
Convention, Oct 19 p 851
- National Machine Tool Builders' Association:
Announcement, Aug 24 p 403
Convention Programme, Sept 28 p 700
Official List, Aug 10 p 335
Proceedings, Oct 12 p 796; Oct 19 p 857

National Roll & Foundry Company:
New Chilled Roll Process,* Oct 5 p 766

National Society for the Promotion of Industrial Education:
Coming Convention, Oct 26 p 887

National Supply and Machinery Dealers' Association:
Announcement of Papers, Oct 5 p 755
Convention, Oct 12 p 798; Oct 19 p 857

Navigation, International Congress of, Dec 14 p 1299

Navy Repair Ship, Model, July 20 p 127

Nelson Valve Company:
Annual Dinner, Sept 7 p 522

Newark Foundrymen's Association, Oct 12 p 819; Dec 21 p 1349

New Departure Mfg. Company:
Machine for Close Measuring Available Free, Nov 2 p 937

New Era Mfg. Company:
New Foundry Flux, Sept 7 p 550

New York & Queens Gas Company:
High Pressure Gas Distribution,* Oct 26 p 919

New York Central Railroad:
Mechanical Equipment of the New York Terminal, Sept 14 p 593

New York Connecting Railroad:
Monumental Bridge Contract Let, Nov 9 p 1024

New York Edison Company:
Electric Generator of 30,000 hp., Nov 9 p 1021

New York Electrical Exposition, Oct 19 p 852

New York Motor Wagon Display in, Nov 23 p 1153

New York Shipbuilding Company:
McMyler 35-Ton Crane,* Nov 16 p 1092

New York's Barge Canal and Iron Ore Freights, Aug 24 p 417

New Zealand, Iron Industry in, Dec 7 p 1247

Newton Machine Tool Works, Inc.:
Combination Portable Boring, Drilling and Milling Machine,* Aug 10 p 331

Grinder for Planer Cutters,* Aug 10 p 327

Internal Cold Metal Saw,* Nov 16 p 1083

New Brace Miller,* Aug 10 p 336

Niagara Falls, Plan to Restore Original Natural Beauty, Nov 30 p 1195

Niagara Falls Power Development, Additional, Nov 30 p 1171

Nicholson, W. H., & Co.:
Wyoming Steam Trap,* Nov 9 p 1041

Nickel Steel, Properties of 3 Per Cent., Aug 10 p 326

Nicoll, B., & Co.:
Rate Discrimination Alleged on Eastern Iron Ores, Sept 21 p 611

Niles-Bement-Pond Company:
Le Blond Combination Miller,* Nov 16 p 1094

Northern Engineering Works:
Coal-Handling Crane,* Dec 21 p 1359

Northern Iron Company:
Unusual Casts of Low Phosphorus Iron, Aug 17 p 385

Norton Company:
Factory Fire-Fighting System,* Dec 21 p 1360

Health of Employees, Oct 5 p 719

Medical Department,* Dec 7 p 1244

Safety as Applied to Grinding Wheels, July 20 p 140

Norton Grinding Company:
Axle-Grinding Machine,* Nov 23 p 1148

O.

Obituary:
Avery, George C., Aug 3 p 237
Beale, Oscar J.,* July 20 p 141
Boytz, B. F., Dec 7 p 1220
Bradley, Henry L., Oct 12 p 799
Brooks Byron A., Oct 5 p 721
Brooks, Major James C., July 20 p 141
Brunner, Christian O., Sept 14 p 577
Bryant, Orrin, Aug 31 p 461

Carlin, William J., Dec 21 p 1346

Chambers, Cyrus, Jr., July 13 p 75

Christie, James, Aug 31 p 461

Christie, Robert, Dec 28 p 1397

Colles, Edward G. T., Sept 14 p 577

Drawbaugh, Daniel F., Nov 9 p 1018

Dwyer, James, Sept 28 p 677

Eaton, Charles S., July 20 p 141

Eaton, John, Sept 21 p 625

Fennerty, Harry A., July 20 p 141

Eldredge, Barnabas, Dec 7 p 1220

Field, Henry P., July 6 p 7

Flinn, Elisha H., Dec 7 p 1220

Forbes, Harry F., Nov 30 p 1183

Frohmman, Harry F., July 13 p 75

Garrison, Daniel E., Jr., Sept 7 p 521

Gates, John W.,* Aug 10 p 298

Gaulbert, William R., July 27 p 193

Gobeille, Joseph L., Oct 5 p 721

Green, Col. W. C., Aug 10 p 299

Greening, S. O., Sept 7 p 521

Grubb, Charles B., Nov 23 p 1123

Hall, Harry R., Dec 14 p 1208

Hall, Zachary T., Oct 19 p 851

Harden, Edward W., Sept 14 p 577

Harris, William E., Nov 30 p 1183

Haselton, Hyatt S., Aug 3 p 237

Hastings, Washington, Oct 19 p 851

Hebard, George W., Nov 23 p 1123

Hegewald, Charles, Sept 21 p 625

Hillman, J. H., Sr.,* Oct 19 p 850

Hubbard, Walter, Aug 31 p 461

Hughson, George A. F., July 27 p 193

Humphries, Robert B.,* July 20 p 141

Ingraham, Irving E., Aug 10 p 299

Ives, H. R., Oct 12 p 799

Jewell, Pliny, Nov 9 p 1018

Jones, W. M., Oct 12 p 799

Keefe, Samuel H., July 27 p 193

Kelly, Ironton A., Aug 10 p 299

Kelly, Thomas P., Oct 12 p 799

Kemp, Clarence M., July 27 p 193

Kerr, William H., Nov 2 p 951

King, John H., Aug 31 p 461

Klein, Frederick C., Dec 28 p 1397

Koegel, Charles, Aug 17 p 351

Ladd, Sherman W., Sept 14 p 577

Lanman, Joseph K., July 27 p 193

Larrabee, Henry C., Aug 3 p 237

Latshaw, W. H., Aug 31 p 461

Lewis, John L., Nov 9 p 1018

Long, Frank R., Sept 7 p 521

Love, William H., Nov 23 p 1123

Mackay, James, July 20 p 141

McLaren, John, Oct 19 p 851

Marwedel, C. F., Nov 23 p 1123

Marx, August, Nov 16 p 1070

Mather, Robert, Oct 26 p 900

Mitchell, John R., Aug 10 p 299

Morrison, Robert C., Dec 7 p 1220

Mott, Augustus W., July 6 p 7

Neely, Thomas, Oct 19 p 851

Oldershaw, Hiram, Aug 24 p 416

Osborne, John H., Aug 24 p 416

Pancoast, Henry B., July 13 p 75

Parmelee, Arthur W., Dec 28 p 1397

Peck, Edward W., Nov 2 p 951

Phillips, Charles H., Nov 9 p 1018

Pohl, Edward, Nov 16 p 1070

Rea, Charles, Nov 16 p 1070

Reeves, Albert B., Nov 16 p 1070

Rhoads, John B., Sept 28 p 677

Rice, C. L., Nov 16 p 1070

Richards, Thomas C., Aug 24 p 416

Robbins, Francis L., Sept 14 p 577

Salter, T. F., Nov 9 p 1019

Schumann, Francis, July 13 p 75

Shuster, Franklin B.,* Aug 24 p 416

Simonds, Edwin F., Sept 14 p 577

Sims, Joseph W., Oct 19 p 851

Souther, John, Sept 21 p 625

Steele, Omar N., Aug 24 p 416

Stowe, Aaron F., Nov 9 p 1019

Stower, James N., Dec 7 p 1220

Stranahan, Olin A., Sept 14 p 577

Tanzer, Arnold, Dec 28 p 1397

Thomas, David J., Dec 28 p 1307

Thompson, A. P., Nov 30 p 1183

Treadway, A. R.,* Oct 26 p 899

Trout, Henry G., Aug 10 p 299

Tudor, Hugh,* Dec 7 p 1220

Viall, Richmond,* Nov 23 p 1123

Wagner, Frederick L., Aug 31 p 461

Warner, John McM., Nov 16 p 1070

Webber, George, Oct 12 p 799

Weed, Walter I., Aug 24 p 416

Weiler, C. Franklin, Sept 28 p 677

Wilson, Francis B., Nov 9 p 1019

Wood, Howard, July 6 p 7

Oglebay, Earl W.:
Testimony at Steel Investigation, Aug 3 p 261

Ohio Machine Tool Company:
Standard versus Heavy Duty Shapers, Sept 7 p 523

Ohio Steel & Wire Company:
New Wire Mill, Aug 17 p 368

Ohio's State Building Code, Sept 7 p 526

Oil:
Adulteration, Important Discovery Regarding, July 13 p 72 and p 91; Aug 17 p 386

American Twentieth-Century Loose Pulley Cup,* July 27 p 214

Fuel Specifications, Aug 3 p 261

Furnaces for Automobile Parts, MacLeod & Co.,* Nov 9 p 1036

International-Amet Gas Producer,* July 13 p 100

Mammoth Potrero Gusher, Aug 3 p 258

New Burt Filter,* Oct 12 p 819

Papers on Fuel, Aug 10 p 323

Production in 1910, Dec 21 p 1349

Pump House at Gary,* July 27 p 203

Oiling System, Burt Automatic,* July 13 p 111

O'Kelly Speed-Reducing Gear, New Model of,* Aug 10 p 333

Oldham, George, & Son Company:
Riveting Hammer,* Nov 2 p 985

Olney, Richard:
Problem of the Trusts, Nov 9 p 1026

Olsen, Tinius, & Co.:
Autographic Transverse Testing Machine,* Aug 3 p 277

Open-Hearth Steel, Heat Treatment on Acid and Basic, of Similar Composition, July 6 p 25

Ore:
(Also see Lake Superior Ore)

Canada's Titaniferous, Used in the United States, Oct 19 p 865

Chinese Exports of, Sept 28 p 700

East Texas Developments, July 27 p 197

French Production in 1910, Oct 26 p 904

Great Northern Lease, Oct 19 p 854; Oct 26 p 901

Imports of Swedish, Oct 26 p 887

Jones Process for "Metallizing," Dec 14 p 1305

Loading at El Cuero Mines,* Oct 5 p 752

Minnesota Valuations, Nov 2 p 937

Preparation of Brown, Sept 7 p 528

Production in 1910, Aug 24 p 420

Rate Discrimination Alleged on Eastern, Sept 21 p 611

Sintering of Mayari Ore in Cuba,* Sept 14 p 586

Sintering Process, Dwight & Lloyd,* Aug 24 p 422; Dec 21 p 1349

Some Fallacies, Nov 9 p 1000

Southwestern Virginia Development, Sept 28 p 681

To Concentrate Moose Mountain, Nov 30 p 1183

Weiss Briquetting Process, Nov 30 p 1185

Ore Dryer, Atlas, Sept 28 p 682

Organizer of Men in Management, Nov 2 p 958

Oriskany Ore & Iron Corporation:
New Virginia Blast Furnace, Nov 23 p 1144

Osann, Prof. B.:
Foundry Drying Oven, Oct 19 p 864

Oshorn Mfg. Company:
Drop-Plate Squeezer,* Oct 12 p 803

Otis Steel Company, Ltd.:
Plans, Nov 30 p 1184

Outerbridge, Alexander E., Jr.:
Detecting Adulteration of Oils, July 13 p 91; Aug 17 p 386

Oven, Foundry Drying, Oct 19 p 864

Overhead Expense, Nov 30 p 1190

Oxy-Acetylene Welding Menaced, Nov 9 p 1001

Oxy-Carbi Company:
New Portable Welding Machine,*
Sept 21 p 628
Oxygen and Hydrogen, Generating Elec-
trolytically,* Aug 17 p 386; Aug
31 p 491

P.

Packing, Need of Stronger, Sept 21 p
627
Packing Tool, Strode,* Sept 7 p 547
Panama:
Canal Cableways,* Oct 12 p 812
Canal Hydraulic Equipment Contract,
Dec 21 p 1347
Engineers Inspect Canal Gates, July
20 p 129
Locomotives to Tow Ships Through,
Oct 26 p 903
Lower Prices on Rails, Aug 17 p 379
Proposed Steamship Line, Sept 7 p
522
Sale of French Scrap Material, Oct 13
p 813
Scrap Sale, Sept 7 p 520
Park Drop Forge Company:
Improvements, Oct 5 p 736
Patents:
And the Public Welfare, Nov 2 p 950
German Law Practice, July 27 p 198
Molding Machine Decision, Dec 14 p
1276
Pattern Handling in a Steel Foundry,*
Aug 10 p 330
Pattern Storage, Berger Steel Racks
for,* Dec 7 p 1255
Pawling & Harnischfeger Company:
Interesting Crane Installation,* July 6
p 35
Peck, E. C.:
Systematic versus Scientific Manage-
ment, Aug 17 p 364
Peine Steel Works:
Revolving Grate Gas Producer, Nov 9
p 1017
Pelton Water Wheel Company:
Panama Canal Hydraulic Equipment
Contract, Dec 21 p 1347
Pennsylvania Crusher Company:
Crusher Litigation, Nov 16 p 1092
Pennsylvania Engineering Works:
Minnesota Steel Company Blast Fur-
naces, Aug 10 p 331
Pennsylvania:
Industrial Legislation in, Aug 17 p 350
Many Electric Power Charters in, Aug
17 p 350
Pennsylvania Railroad:
Freight Handling in Small Shipments,
Nov 2 p 984
Huge Locomotive, Dec 28 p 1397
Need of Stronger Packing, Sept 21 p
627
Notable Tunnel Ventilating Plant,*
Aug 31 p 403
Steel Cars, 52-Ft., Dec 7 p 1255
Pennsylvania Steel Company:
Interesting Rail Transaction, Dec 7 p
1243
Perin, Charles P.:
Iron and Steel Industry in India, Sept
28 p 682
Testimony at Steel Investigation, Aug
10 p 313
Perkins, George W.:
Constructive Programme on the Trust
Question, Dec 7 p 1233
Testimony at Steel Investigation, Aug
17 p 366
Philadelphia Foundry Foremen:
Outing, Sept 21 p 611
Meetings, Oct 19 p 864; Nov 23 p 1109
Philadelphia Foundrymen's Association,
Sept 14 p 579; Oct 12 p 797; Nov
9 p 1042; Dec 14 p 1295
Philadelphia Metal Manufacturers' As-
sociation:
Annual Meeting, Dec 28 p 1401
Philadelphia Roll & Machine Company:
Motor-Driven Sheet and Strip Mill,*
Sept 28 p 696
New Wire and Rod Machines,* Nov
16 p 1082
Phoenix Iron Company:

Three Notable Open-Hearth Furnaces,
Nov 30 p 1203
Physical Properties of Cast Iron, Nov
16 p 1077
Piece-Rate Cutting, Sept 14 p 563
Pig Iron:
Chinese Exports of Iron Ore and,
Sept 28 p 700
Congressman Underwood's Boast of
Cheap Iron, Sept 7 p 505
Cost at One Southern Plant, Aug 10 p
319
Cost of Producing Alabama, Sept 7 p
545
Cost of Southern, Sept 21 p 642
Curve of Production,* Oct 12 p 780
German Production First Half 1911,
Aug 3 p 266
Half-Yearly Statistics, Aug 3 p 237
Mixers, Aug 3 p 265
Monthly Statement,* July 6 p 6; Aug
10 p 300; Sept 7 p 508; Oct 5 p
722; Nov 9 p 1004; Dec 7 p 1234
Place of 1911 in the Record, Nov 30 p
1170
Production in United States, First Six
Months of 1911, Aug 10 p 320
Production of Japan, Nov 2 p 982
Russian Duty, July 20 p 129
Suiting Processes to Conditions, July
13 p 72
Superior Special Charcoal, Sept 7 p
509
United States Production First Half
of 1911, Aug 3 p 237
Unusual Casts of Low Phosphorus,
Aug 17 p 385
World's Production of, Aug 3 p 282
Pipe Hangers, Morgan Eclipse,* Dec 7
p 1256
Pipe Industry, Wrought, Dec 21 p 1332
Pipe Line Carrying Superheated Steam,
Efficiency of, Aug 3 p 278
Pipe Machine, Merrell Portable,* July 6
p 59
Pittsburgh:
And the Steel Corporation, Aug 17 p
381
More Factories Wanted in, Sept 21 p
624
Pittsburgh and Vicinity Business Notes,
Sept 7 p 506; Sept 14 p 595; Sept
21 p 626; Sept 28 p 679; Oct 5 p
723; Oct 19 p 848; Oct 26 p 905;
Nov 2 p 957; Nov 9 p 1019; Nov
16 p 1071; Nov 23 p 1129; Nov 30
p 1184; Dec 7 p 1220; Dec 14 p
1298; Dec 21 p 1347; Dec 28 p
1397
Pittsburgh Coal-Dock Company:
Coal-Handling Plant at Duluth,* Dec
7 p 1240
Pittsburgh Foundrymen's Association,
Sept 21 p 625; Oct 26 p 898; Dec
7 p 1256
Pittsburgh Gage & Supply Company:
Gaco Specialties,* Sept 28 p 703
Pittsburgh Steel Company:
Annual Report, Oct 12 p 821
New Blast Furnaces, Dec 7 p 1239;
Dec 21 p 1348
Pittsburgh Valve, Foundry & Construc-
tion Company:
Aiken Hydraulic Valves, July 20 p 165
Planers:
Aluminum Pulleys for the American,
Aug 3 p 271
Cincinnati Special Drive,* Nov 23 p
1152
Motor Driving for,* Oct 26 p 914
Newton Grinder for Planer Cutters,*
Aug 10 p 327
Plating of Metals, Powder for Ready,
July 20 p 165
Platt Iron Works Company:
Readjustment, Aug 3 p 273
Poetter, G. m. b. H.:
Friedrich Changeable Open-Hearth
Furnace Port,* July 20 p 152
Political Science, Academy of:
To Discuss Relation of Government to
Business, Oct 26 p 900
Pollock, Wm. B., Company:
Latest Development in Slag Pots,*
Aug 17 p 369

Poor's Manual for 1910, July 27 p 217
Porceliron Stove Company, July 20 p 140
Porter, John Jermain:
Physical Properties of Cast Iron, Nov
16 p 1077
Potrero Gusher, Mammoth, Aug 3 p 258
Power Specialty Company:
New Water Cooler,* Nov 9 p 1034
Pratt & Cady Company:
Sales Offices, Nov 23 p 1108
Pratt & Whitney Company:
New Vise,* Aug 24 p 430
Prejudice, Appeal to, Nov 30 p 1169
Prentice Brothers Company:
New Radial Drill,* Oct 26 p 916
Prescott, Fred M., Steam Pump Com-
pany:
Herringbone Gears,* Dec 21 p 1364
Presses:
Accidents With Metal, Aug 3 p 279
Garrison, Double-Crank Forging,*
Sept 21 p 644
New Ferracute Toggle Drawing,* July
20 p 164
New Standard Double-Acting Cam,*
Dec 21 p 1356
Waterbury Large Double-Acting
Cam,* Oct 12 p 807
Prices:
American Steel Below Foreign, Dec
21 p 1330
Basing on a Normal Business, Sept 28
p 663
Do Congressmen Enjoy Ruinous Steel
Prices? Nov 30 p 1171
Lowness of Steel, Nov 23 p 1108
Steel and Commodity, Aug 24 p 400
To-day's and Other Levels, Sept 21 p
608
Pridmore, Henry E.:
Power Squeezing with Molding Ma-
chine,* Nov 9 p 1035
Primos Chemical Company:
Alloys for Steel, Oct 26 p 887
Producer Gas Engines, Small Unit, Nov
9 p 1001
Producer Gas in Texas, Lignites and the
Use of, Sept 28 p 676
Producer Gas Investigations, Nov 30 p
1194
Production Statistics:
Alloyed Steel in 1910, Oct 5 p 743
Canadian Iron and Steel, Nov 9 p 1016
Cement in 1910, Nov 23 p 1164
Census Bureau's Report on Iron and
Steel, Aug 31 p 470
Coal in 1910, Sept 7 p 523
Coke and By-Products Saved, July 27
p 198
Copper, June, July 13 p 96; July, Aug
10 p 318; Aug, Sept 14 p 589; Sept,
Oct 12 p 795; Oct, Nov 16 p 1068;
Nov, Dec 14 p 1295
French Iron Ore in 1910, Oct 26 p 904
Graphite in 1910, Aug 31 p 477
Iron Ore in 1910, Aug 24 p 420
Italy's Iron and Steel in 1910, Oct 5 p
763
Lead in 1910, Dec 7 p 1256
Manganese Ores, Nov 30 p 1187
Oil in 1910, Dec 21 p 1349
Pig Iron, United States, First Six
Months 1911, Aug 10 p 320
Pig Iron of Japan, Nov 2 p 982
Russian Iron and Steel Output 1910,
Oct 5 p 763
Spelter in First Half 1911, July 27 p
197
Swedish Iron and Steel, Nov 2 p 980
United States, First Half 1911, Aug 3
p 237
United States Iron and Steel, 1910,
Aug 3 p 249
World's Production of Aluminum,
Sept 7 p 507
World's Production of Coal, Nov 30
p 1185
World's Production of Pig Iron, Aug
3 p 282
Profit-Sharing Plan of Youngstown
Sheet & Tube Company, Aug 17 p
385
Pulleys for the American Planers, Alu-
minum, Aug 3 p 271
Pulleys, Tests of, Oct 26 p 920

Pulsometer Steam Pump Company:
Pulsometer as Power Plant Pump,*
Sept 7 p 548

Pumping Plant, Solar,* Sept 28 p 698

Pumps:

Cutler-Hammer Automatic Oil Con-
troller,* Dec 7 p 1258

Dean Bros. Special Air Pump and Jet
Condenser,* July 6 p 58

Goulds Air Cylinders for the Pyra-
mid,* Aug 3 p 276

Goulds Motor-Driven Mine,* Oct 12
p 811

Goulds, of Exceptional Capacity, Dec
7 p 1261

Goulds Triplex,* Sept 7 p 546

John McDougall Caledonian Iron
Works Company, Ltd.,* Aug 24
p 430

McGowan Duplex,* Oct 19 p 867

New Goulds Centrifugal,* Aug 24 p
427

New Queen City,* Aug 31 p 475

New Standard,* Aug 17 p 384

Pulsometer as Power Plant,* Sept 7
p 548

Vaile-Kimes Motor-Driven House,*
Sept 14 p 597

Pyle-National Electric Headlight Com-
pany:

Improved Contractor's Light,* Dec 14
p 1309

Q.

Queen City Machine Tool Company:
Lubrication of Shaper,* Oct 26 p 918

New Crank Shaper,* July 6 p 43

Queen City Punch & Shear Company:
New Punch,* Aug 31 p 475

Quick Change Drill Chuck, Machine &
Tool,* Dec 7 p 1255

R.

Rack, Driver Drill,* Sept 7 p 550

Racks for Pattern Storage, Berger
Steel,* Dec 7 p 1255

Railroads:

Appliance Exhibition, Oct 26 p 921

Better Feeling Toward, Nov 9 p 1029

Buffalo Union Furnace Company's
Industrial Case, Dec 28 p 1397

Earnings Fairly Good, July 6 p 2

Equipment Orders, July 13 p 97; July
20 p 142; Aug 3 p 282; Aug 10 p
298; Aug 17 p 368; Aug 24 p 402;

Aug 31 p 464; Sept 21 p 629; Oct
26 p 901; Nov 23 p 1128; Nov 30
p 1183

General Foremen's Association, Inter-
national, Convention, Aug 3 p 284

Increasing Traffic, July 27 p 178

Intermountain Rate Decision, Aug 3
p 235

Labor Agitation and Machinery Pur-
chases, Oct 5 p 720

Lake Superior Ore Hearing, July 20
p 147

Mallet Articulated Locomotives on
Ore, July 13 p 97

Trend of Revenues, Oct 19 p 834

Rails:

Branding and Heat Number Stamp-
ing, Oct 19 p 849

Broken Lehigh Valley, Oct 12 p 800*;
Nov 23 p 1126

Chrome Steel in Tunnels, Aug 31 p
463

Ductility in Steel, July 13 p 97

First Steel Rolled at Johnstown, Nov
9 p 1002

Foreign Trade, July 13 p 95

Interesting Transaction, Dec 7 p 1243

Lower Prices on Panama, Aug 17 p
379

Recent Experience with Titanium,
Sept 7 p 507

Railway Business Association:

Alabama's Governor Pleases Railroad
Interests, Nov 30 p 1204

Revolution in Freight Claims, July 27
p 192

Ramp, H. M.:

What the Foundry Thinks of the Ma-
chine Shop, Dec 21 p 1350

Ranken, David, Jr., School of Mecha-
nical Trades, Dec 7 p 1252

Ransom Mfg. Company:

Emery Wheel Guard,* Nov 2 p 982

Portable Grinder,* Nov 9 p 1038

Reaction from High-Voltage Apparatus,
Oct 26 p 886

Reading-Bayonne Steel Casting Com-
pany, Nov 30 p 1199

Reading Crane & Hoist Works:

Special Cranes,* Sept 28 p 704

Reading Iron Company:

Improvements, Oct 26 p 917

Wrought Iron Versus Steel Pipe, Nov
30 p 1188

Recorder, Yarnall-Waring Lea,* Dec 28
p 1404

Records:

At a Crane Furnace, Oct 26 p 887

In Building Rolling Mill Equipment,
Mesta, Oct 5 p 761

In Unloading Iron Ore, New 24-Hour,
Aug 24 p 416

Some Recent Drilling,* July 27 p 215

Recorders:

For Vehicles, Travel, Nov 23 p 1154

New Brown Electric,* Nov 9 p 1042

Stromberg Electric,* Nov 16 p 1084

With Frictionless Inking Device, Bris-
tol,* Nov 30 p 1201

Redfield, William C.:

American Export Trade, Oct 5 p 744

Rees, James, & Son Company:

Pittsburgh Steel Steamboats for Ex-
port, Dec 7 p 1243

Reinforcing Bars, Twisting of,* Sept 21
p 641

Remington Machine & Tool Company:

Marking Machine,* Aug 17 p 383

Replacement Parts, Buying of, Oct 12 p
782

Republic Iron & Steel Company:

Annual Report, Aug 17 p 380

Haselton Plant,* Aug 17 p 370

No. 4 Blast Furnace at Haselton,
Ohio,* Dec 28 p 1402

Rhodes, L. E.:

Vertical Shaper Attachment,* Dec 28
p 1411

Richardson, George W.:

Motor Driving for Planers,* Oct 26 p
914

Richardson-Phenix Company:

Engine Lubrication,* Dec 14 p 1317

Riddle Oscillator, Hanna Electric,* Sept
21 p 638

Rims, Rolling of Automobile, Aug 31 p
488

Riter-Conlev Mfg. Company:

Large Contracts, Dec 14 p 1277

Riveter, Grant Motor-Driven Ceiling,*
Nov 2 p 983

Riveting Machine:

New Shrester,* Oct 19 p 859

Robeson Iron Company:

Good Record on Sulphurs, Nov 23 p
1151

Roberts, E. P.:

Design of a Factory System,* Aug 24
p 426

Robertson, Thomas D.:

Electrical Iron Smelting in Sweden,*
Oct 12 p 804

Robertshaw Mfg. Company, July 20 p
143

Rochester Boring Machine Company:

Duplex Facing Machine,* Dec 14 p
1200

Rockford Machine Tool Company:

New Plant, Aug 31 p 469

Rockwood Sprinkler Company:

Sprinklers in Knock-Down Form,*
Aug 24 p 428

Roll Process, National New Chilled,*
Oct 5 p 766

Rolling Mills, Flywheels for Motor-
Driven, Sept 28 p 700

Roofing, Selling Arguments for Tin,
July 6 p 33

Roofing Sheets, Iron and Steel, Nov 23
p 1145

Roosevelt, Theodore:

Testimony at Steel Investigation, Aug
10 p 316

Root & Van Dervoort Engineering Com-
pany:

Factory Expansion, Sept 21 p 641

Routing Material Through Shop Depart-
ments,* Nov 30 p 1192

Rowe, Ernest H.:

Bonuses and the Location of Indus-
tries, Aug 10 p 297

Roy, A. R.:

Swedish Steels, Nov 9 p 1025

Rules, New Brown & Sharpe,* Dec 7 p
1246

Rumely, M., Company:

Enlarged Operations, Nov 30 p 1202;
Dec 21 p 1366

Foundry of Tractor Works,* Oct 26 p
906

Machine Shops of Tractor Works,*
Nov 2 p 970

Russia:

Duty on Pig Iron, July 20 p 129

Iron and Steel Output in 1910, Oct 5
p 763

S.

Safeguarding Their Men, American
Ironmasters, Nov 16 p 1082

Safety Can for Gasoline, Langrehr,* Oct
19 p 866

Safety Devices, Compulsory, Oct 5 p 719

Safety Devices for Grinding Wheels,
Aug 17 p 349

Safety in Relation to Machinery, Stand-
ards of,* July 13 p 88; July 20 p
160

Safety Measures May Be Too Thorough,
Aug 3 p 277

Sailing Dates in Foreign Commerce, Aug
17 p 363

Sampierdarena Engineering Works:

Case Hardening of Steel,* Nov 2 p 978

Sand-Blast Machinery, Vogel & Schem-
mann Self-Contained, Nov 2 p 985

Sand Mixing Machine Company:
Portable Molder's Bench,* Dec 21 p
1367

Sargent, C. E.:

Two-Stage Gas-Driven Air Compre-
sor, July 27 p 221

Sauer Power Generating Company:

Transmission Gear,* Nov 16 p 1081

Sawdon, Prof. Will M.:

Tests of Pulleys, Oct 26 p 920

Saws:

Atkins Hack Machine,* Sept 28, p 694

Diamond New Sterling Power Hack
Machine,* Sept 7 p 547

Espen-Lucas Foundry Cold,* Dec 14 p
1312

Langelier Combination Drill and,* Dec
7 p 1254

New Silver Table,* Nov 2 p 977

Newton Internal Cold Metal,* Nov 16
p 1083

Scale, Avery Automatic,* Aug 31 p 490

Schemann & Bronn:

Molten Ferromanganese for Deoxida-
tion, Oct 12 p 801

Schieren, Charles A., Company:

Belting at the Turin Exposition,* Oct
26 p 918

Schley, Grant B.:

Testimony at Steel Investigation, Aug
10 p 313

Schlieper-Daas Company:

Announcement, July 27 p 181

New Soaking Pit Cover,* Dec 14 p
1311

Pittsburgh Universal Straightener,*
Dec 28 p 1404

Schmitz, August:

Wire Flattening Mills,* Dec 21 p 1362

Schneider, Dean Herman:

Analysis of Work, Nov 16 p 1074

Schuchardt & Schutte:

Columbia Chuck,* Aug 3 p 282

Schulz, F. A.:

Tilting Vise,* Aug 24 p 433

Schwab, Charles M.:

Testimony at Steel Investigation, Aug
10 p 315

- Schwanhauser, William:
Worthington High-Duty Pumping Engine,* Oct 5 p 764
- Scientific Management at United States Arsenal, Nov 9 p 1022
- Scientific Management, Latent Service of, Aug 17 p 348
- Scientific Versus Systematic Management, Aug 17 p 364
- Scotch Bar Iron Combination, Sept 7 p 507
- Scott, Arthur P.:
Coke Oven Gas as an Open-Hearth Fuel, Sept 7 p 538
- Scottish Tube Company, Ltd., Aug 10 p 317
- Scrap Material, Sale of French Panama, Oct 12 p 813
- Scrap Sale, Panama, Sept 7 p 520
- Scrap, Speculation by Makers of, Oct 19 p 837
- Scullin-Gallagher Iron & Steel Company:
Steel Foundry Extensions, Nov 2 p 937
- Scully Steel & Iron Company:
Storle Brass Globe Valve,* Oct 5 p 763
- Second-Hand Machinery, Demand for, Dec 21 p 1332
- Sellers, William, & Co.:
Machine Molding for Large Castings,* Dec 28 p 1413
- Selling American Machinery in Europe, Aug 3 p 262
- Selling American Machine Tools in Europe, July 6 p 40
- Seneca Falls Mfg. Company:
Lathe Relieving Attachment,* Nov 30 p 1204
- Service Recorder Company:
Travel Recorder for Vehicles, Nov 23 p 1154
- Sewage Disposal for a Hardware Works,* July 13 p 112
- Shafting, Aligning of,* Oct 12 p 814
- Shafts and Axles, Specifications for Steel, Aug 24 p 425
- Shapers:
Gould & Eberhardt Bevel Gear Roughing,* July 27 p 205
- Lubrication of Queen City,* Oct 26 p 918
- New Queen City Crank,* July 6 p 43
- Rhodes Vertical Attachment,* Dec 28 p 1411
- Standard Versus Heavy-Duty, Sept 7 p 523
- Sheet and Tin Plate Association, Dec 28 p 1398
- Sheet and Tin Plate Scale, July 6 p 42
- Sheets, Iron and Steel Roofing, Nov 23 p 1145
- Shelby Iron Company:
Sixty-seven Years of Charcoal Iron Production, Nov 30 p 1189
- Sherman Law:
As It Works, Oct 5 p 720
- Text of, Nov 9 p 1025
- What It Forbids, Oct 19 p 837
- Shimer, McGlynn & Co.:
Motor-Driven Sheet and Strip Mill,* Sept 28 p 696
- Shipbuilding in 1911, Lake, Dec. 28 p 1403
- Shipbuilding, Lake, at Low Ebb, Aug 31 p 448
- Shop Buildings, Permanency in, Aug 24 p 401
- Shop System for Greater Output,* Aug 3 p 268
- Shop System of Ferracute Machine Company,* July 13 p 106
- Shovel, First Mesaba Range Steam, Sept 28 p 697
- Shovel Work, Steam, Sept 28 p 695
- Shuster, F. B., Company:
New Riveting Machine,* Oct 19 p 859
- Sibley Machine Tool Company:
Box Column Drilling Machine,* Nov 2 p 968
- New Motor-Driven Drills,* Aug 31 p 473
- Sight Feed, Williams Warrior,* Nov 9 p 1040
- Silver Mfg. Company:
New Drills,* Nov 30 p 1202
- New Saw Table,* Nov 2 p 977
- Simmersbach, O.:
Pig Iron Mixers, Aug 3 p 265
- Simonds Mfg. Company:
Lockport Steel Mill,* Aug 3 p 274
- Simplex Radial Drill, Improved Dreses,* Nov 30 p 1195
- Sintering:
Dwight & Lloyd Process,* Aug 24 p 422; Dec 21 p 1349
- Mayari Iron Ores in Cuba,* Sept 14 p 586
- Slag Bucket, Improved Brown,* Dec 7 p 1257
- Slag Pots, Pollock Latest Development in,* Aug 17 p 369
- Slags, Furnace, in Concrete, July 13 p 90
- Slatington Rolling Mills:
Again in Operation, Sept 28 p 705
- Slocumb, J. T., Company:
Tool Store in New York, Sept 21 p 643
- Slocum, Charles V.:
Views on Titanium in Iron and Steel Oct 26 p 903
- Sly, W. W., Mfg. Company:
Foundry Equipment, Sept 7 p 546
- Smith, Herbert K.:
Government Report on the Steel Corporation, July 6 p 57
- Smith, J. M.:
Factory Illumination, Oct 19 p 861
- Smith, Oberlin:
Accidents with the Metal Press, Aug 3 p 279
- Smith, Robert H.:
Textbook and Blue Print Holder,* Sept 14 p 591
- Smith, Senex:
Plan to Restore Original Natural Beauty of Niagara Falls, Nov 30 p 1195
- Snyder, J. E., & Son:
New Heavy-Duty Drills,* Oct 12 p 821
- Soaking Pit Cover, New Schlieper-Daae,* Dec 14 p 1311
- Socket, Corona Drill,* Aug 10 p 333
- Softening Water on a Large Scale, July 27 p 202
- Solar Pumping Plant,* Sept 28 p 698
- Southern Iron & Steel Company:
Consolidation with Alabama Consolidated, Aug 24 p 421
- Reorganization, Oct 12 p 795
- Southern Iron Company Promotion, Suit Over a, Oct 26 p 911
- Southern Iron Consolidations, Aug 24 p 421
- Southern Pig Iron, Cost of, Sept 21 p 642
- Specifications:
For Spelter, Aug 17 p 387
- Fuel Oil, Aug 3 p 261
- Old Copper and Brass, July 27 p 200
- Reinforcement Bars, Aug 17 p 379
- Steel Axles and Shafts, Aug 24 p 425
- Steel Reinforcement Bar, Aug 17 p 379
- Spelter:
Production in First Half of 1911, July 27 p 197
- Specifications for, Aug 17 p 387
- Spencer Wire Company:
Unusual Service Records, Sept 28 p 693
- Sprayer, Murphy Mold,* Dec 14 p 1316
- Spring Making Machines, Baird,* Sept 7 p 527
- Springer, J. F.:
Welding and Cutting Machine,* Aug 31 p 472
- Springfield Machine Tool Company:
Fox 15-In. Lathe,* Oct 5 p 747
- Sprinkler Efficiency, Automatic, Aug 24 p 431
- Sprinklers in Knock-Down Form,* Aug 24 p 428
- Squeezer, Osborn Drop Plate,* Oct 12 p 803
- St. Louis Blast Furnace Company:
Litigation, Oct 26 p 918
- St. Louis, Rankin Great Trade School at, Dec 7 p 1253
- Stamping Plant, Acklin Toledo Metal,* Sept 14 p 594
- Standard Bridge Tool Company:
Equipment Sold, Dec 14 p 1304
- Standard Cast Iron Pipe & Foundry Company:
Interesting Crane Installation,* July 6 p 35
- Standard Chain Company:
Makes Hardware Saddlery, July 27 p 209
- Standard Gas Power Company:
New Bituminous Gas Producer,* Dec 14 p 1310
- Standard Machinery Company:
New Double-Acting Cam Press,* Dec 21 p 1356
- Standard Mfg. Company:
New Gear Cutters,* Nov 2 p 983
- Standard Oil Company:
Dissolution Plan, Aug 3 p 237
- Standard Pump & Engine Company:
New Pumps,* Aug 17 p 384
- Standard Scale & Supply Company:
Scale and Truck Orders, Sept 28 p 691
- Standard Welding Company:
New Addition,* July 27 p 216
- Standardizing Factory Expense and Cost, Nov 16 p 1072
- Stanley Investigating Committee, Nov 16 p 1057; Nov 23 p 1122
- Stark Rolling Mill Company:
Toncan Metal, July 6 p 59
- Unique Advertising Device Made of Toncan Metal, Nov 2 p 959
- Starrett, L. S., Company:
Declares "Open Shop," Oct 5 p 739
- Starters, Allen-Bradley Motor,* Sept 21 p 646
- Statistics, Trade, Dec 28 p 1382
- Steam:
Efficiency of Pipe Line Carrying Superheated, Aug 3 p 278
- Mammoth in Power Generators, Nov 9 p 1001
- New Scheme for Storing Exhaust, Aug 10 p 319
- Steamboats for Export, Pittsburgh Steel, Dec 7 p 1243
- Steam Company, American District:
New Plant,* Dec 14 p 1300
- Steamship Line, Proposed Panama, Sept 7 p 522
- Steamship Terminals, Cargo Transference at, Nov 23 p 1151
- Steel:
Acid and Basic Open-Hearth, Aug 10 p 324
- Annealing Castings,* Sept 7 p 542
- Carborundum for Special, Nov 16 p 1086
- Case Hardening,* Nov 2 p 978
- Castings from Electric Furnace,* July 20 p 148
- Derricks and Drilling Rigs, July 27 p 202
- Ductility in Rail, July 13 p 97
- Experiments on 0.2 Per Cent. Vanadium, July 27 p 205
- Heat Treatment of,* Nov 23 p 1140
- Heat Treatment of Low-Carbon Nickel, July 27 p 195
- Heat Treatment on Acid and Basic Open-Hearth of Similar Composition, July 6 p 25
- Ingot Molds of, Oct 26 p 904
- International Conference, July 13 p 74; July 20 p 144; Aug 3 p 252
- Manufacture and Treatment of Tool, Dec 7 p 1238
- Molybdenum, from the Electric Furnace, Sept 21 p 641
- Nickel, 3 Per Cent., Aug 10 p 326
- Production of Alloyed in 1910, Oct 5 p 743
- Strength of, from Structural Shapes,* July 20 p 156

- Study of Tires,* July 20 p 154
 Swedish, Nov 9 p 1025
 Titanium and Low-Carbon Basic,* Dec 14 p 1306
- Stein, C. M.:
 Case Hardening of Steel,* Nov 2 p 978
- Sterling Equipment Company:
 Air Economizer,* Oct 12 p 808
- Sterling Machine Company:
 Acme Automatic Engine,* Sept 7 p 531
- Sterling Power Hack Saw Machine,
 Diamond New,* Sept 7 p 547
- Stockbridge Machine Company:
 Crank Motion,* Oct 5 p 760
- Stock, Guy J.:
 Process for Steel Castings,* Sept 7 p 524
- Stoever-Treadwell Consolidation, Sept 28 p 664
- Storage Battery for the Steel Mill, Oct 19 p 859
- Storle Brass Globe Valve, Scully,* Oct 5 p 763
- Stoughton, Bradley:
 Annealing Steel Castings,* Sept 7 p 542
- Straightener, Schlieper-Daue Universal,* Dec 28 p 1404
- Strainers, Large Lagonda,* Sept 14 p 592
- Stratton, H. F.:
 Lifting Magnets in Foundries, July 13 p 92
- Street, A. L. H.:
 Judicial Decisions of Interest to Manufacturers, July 27 p 201; Aug 10 p 345; Aug 17 p 397; Aug 31 p 466; Sept 21 p 647; Oct 19 p 872; Nov 16 p 1093; Dec 21 p 1348
- Strike Benefits, Machinists', Oct 26 p 898
- Strikes, Insurance Against, Oct 5 p 719
- Strode, Edward P.:
 Packing Tool,* Sept 7 p 547
- Stromberg Electric Company:
 Chronograph,* Nov 16 p 1084
- Structural Shapes, Strength of Steel from,* July 20 p 156
- Sullivan, W. B.:
 Tool Steel, Dec 7 p 1238
- Sulphuric Acid Corrosion Test,* July 13 p 99
- Sulphurs, Good Record in, Nov 23 p 1151
- Sulphur Tests, Improvement in, Aug 17 p 363
- Sun Power Company:
 Solar Pumping Plant,* Sept 28 p 608
- Superior Charcoal Iron Company:
 Charcoal Pig Iron, Nov 2 p 983
 Special Charcoal Pig Iron, Sept 7 p 500
- Supply and Machinery Dealers' Meeting:
 Papers to be Read, Oct 5 p 755
 Proceedings, Oct 12 p 798
- Supply and Machinery Manufacturers' Association, American:
 Campaign to Increase Membership, Oct 19 p 865
- Swank, James M.:
 Production of Vanadium Steel in 1910, Oct 19 p 836
- Sweden, Electrical Iron Smelting in,* Oct 12 p 804
- Swedish Iron and Steel Statistics, Nov 2 p 980
- Swedish Iron & Steel Corporation:
 Hunts Swindlers, Aug 3 p 265; Sept 7 p 523
- Swedish Iron Institute, July 27 p 108
- Swedish Iron Ore, Imports of, Oct 26 p 887
- Swedish Steels, Nov 9 p 1025
- Sweetser, R. H.:
 Great Iron-Making Nations, Dec 14 p 1296
- Swiss Metal Industries, Lessons from the,* Oct 5 p 748
- Switchboard, New Cutler-Hammer Crane,* Nov 16 p 1081
- Symington, T. H., Company:
 Core Room Conveyor System,* July 27 p 217
- Systematic Versus Scientific Management, Aug 17 p 364
- T.
- Taber Mfg. Company:
 Molding Machine Patent Decision, Dec 14 p 1276
- Tags for Factory Operating Systems, Sept 7 p 522
- Tappers:
 Garvin Automatic,* Aug 24 p 431
 Garvin Two-Head Automatic,* Nov 23 p 1151
- Taps, Little Giant Serial,* Oct 19 p 868
- Tariff: Proposed Iron and Steel Changes, Aug 24 p 416
- Tata Iron & Steel Company:
 American Engineers for, Sept 21 p 623
 First Furnace Blown in, Dec 7 p 1261
- Tate, Jones & Co., Inc.:
 Heat-Testing Furnaces, July 27, p 213
 New Oil-Fired Flanging Furnace,* Dec 7, p 1243
- Taxable Valuation of Michigan Iron Mines, Nov 9 p 1028
- Taxation, New York City, Nov 30 p 1191
- Tax, Proposed Michigan Corporate Excess, Dec 21 p 1333
- Taylor Iron & Steel Company:
 Tisco Manganese Steel Chain,* Oct 19 p 868
- Taylor, N. & G., Company:
 Improvements, Dec 14 p 1317
 Selling Arguments for Tin Roofing, July 6 p 33
- Telescope, Turret Equatorial,* Dec 21 p 1368
- Temperature Pendants, Green, Nov 9 p 1042
- Tempering, Problem in Steel, July 20 p 126
- Temple, W. C.:
 Testimony at Steel Investigation, Aug 17 p 366
- Tennessee Coal, Iron & Railroad Company:
 Convict Coal Miners, Dec 14 p 1277
- Tennessee Rolling Works:
 Dismantled, July 27 p 199
- Kentucky Iron History, Sept 7 p 543
- Terminals, Cargo Transference at Steamship, Nov 23 p 1151
- Terre Haute, Indianapolis & Eastern Traction Company:
 Electric Switching Locomotive,* Sept 28 p 694
- Terry Steam Turbine Company:
 High-Pressure Blower Set,* Nov 9 p 1040
- Turbo-Cupola Blower,* Dec 28 p 1410
- Testing Machine, Olsen Autographic Transverse,* Aug 3 p 277
- Testing Materials, American Society for:
 Action on Various Matters, Nov 9 p 1016
 Convention Proceedings, July 6 p 20
 Specifications for Steel Axles and Shafts, Aug 24 p 425
 Year Book, Oct 19 p 869
- Testing Materials, International Association for:
 Sixth Congress Committee, Sept 28 p 665
- Tests for Metals, 1909, July 13 p 90
- Tests of Pulleys, Oct 26 p 920
- Texas, Lignites and the Use of Producer Gas in, Sept 28 p 676
- Thiele, A.:
 Ingot Molds of Steel, Oct 26 p 904
- Thin-Lined Blast Furnace Construction,* Dec 28 p 1400
- Thomas Iron Company:
 Annual Meeting, Sept 21 p 611
- Thomas Meter Installations, Two, Aug 31 p 464
- Thompson Electric Company:
 Lamp Hangers for Mill Lights, Oct 19 p 860
- Thompson Hanger Works:
 Automatic Cut-Out Hanger,* Aug 17 p 388
- Thompson, Henry E.:
 New Molding Flask,* Dec 28 p 1415
- Thomson Electric Welding Company:
 New Electric Welder,* Aug 10 p 329
- Thornton, George Q.:
 Labor and Lower Prices for Commodities, Sept 7 p 504
- Threading Machines:
 New Landis,* Aug 3 p 280
- Thyssen, Fritz:
 Remarks at the Brussels Conference, Aug 31 p 448
- Time Recorder, Stromberg Electric,* Nov 16 p 1084
- Time Study Observations,* Nov 16 p 1090
- Tin Plate:
 And Sheet Association, Dec 28 p 1398
 And Sheet Scale, July 6 p 42
 Carnahan Genuine Charcoal Iron, Sept 7 p 549
 Imports and Exports, Oct 12 p 782; Dec 14 p 1327
- Tin Roofing, Selling Arguments for, July 6 p 33
- Tires, Study of Steel,* July 20 p 154
- Tisco Manganese Steel Chain, Taylor,* Oct 19 p 868
- Titaniferous Iron Sands, Sept 7 p 537
- Titaniferous Ores Used in the United States, Canada's, Oct 19 p 865
- Titanium Alloy Mfg. Company:
 Product of Titanium Steels This Year, Nov 2 p 982
 Recent Experience with Titanium Rails, Sept 7 p 507; Oct 26 p 900
- Titanium Alloys with and Without Aluminum, Nov 16 p 1056
- Titanium and Low-Carbon Basic Steel,* Dec 14 p 1306
- Titanium in Iron and Steel, Views on, Oct 26 p 903
- Tobacco Trust Decision, Nov 16 p 1057
- Toledo Bridge & Crane Company:
 Special Coal Handling Crane,* Aug 10 p 321
- Toledo Metal Stamping Plant, Acklin,* Sept 14 p 594
- Toncan Metal:
 Qualities, July 6 p 59
 Unique Advertising Device Made of, Nov 2 p 959
- Tool Steel, Manufacture and Treatment of, Dec 7 p 1238
- Tools and Appliances, New, July 27 p 220; Aug 17 p 373; Aug 24 p 434; Aug 31 p 460; Sept 21 p 648; Oct 19 p 881; Nov 2 p 949; Nov 16 p 1103; Nov 23 p 1165; Dec 7 p 1271; Dec 21 p 1370
- Topping, John A.:
 Testimony at Steel Investigation, Aug 10 p 314
- Town, F. E.:
 Modern Types of Elevators,* Aug 17 p 376
- Traction Engine, Holt Caterpillar,* Aug 10 p 334
- Tractor Works at La Porte, Rumely Foundry,* Oct 26 p 906
- Trademark Treaties, World, Sept 7 p 535
- Trade Publications, July 13 p 86; Aug 17 p 397; Aug 24 p 415; Aug 31 p 459; Sept 7 p 520; Sept 21 p 649; Oct 5 p 735; Oct 19 p 873; Oct 26 p 931; Nov 2 p 997; Nov 9 p 1017; Nov 23 p 1125; Nov 30 p 1213; Dec 21 p 1371; Dec 28 p 1423
- Trade School at St. Louis, Rankin Great, Dec 7 p 1252
- Transformer, Westinghouse Improved,* Sept 21 p 645
- Transmission Gear, Sauer,* Nov 16 p 1081

Traps:

- American Detroit Return,* Nov 16 p 1088
 Moll, for Heating Plants, July 6 p 53
 Nicholson Wyoming,* Nov 9 p 1041
 Travel Recorder for Vehicles, Nov 23 p 1154
 Treadwell Engineering Company:
 Electric Steel Castings, Dec 21 p 1333
 Treadwell-Stoeber Consolidation, Sept 28 p 664
 Trench, C. S., & Co.:
 Hopeful Forecast, Sept 14 p 565
 Triumph Electric Company:
 Job Handling System,* Sept 21 p 638
 Trucks, Motor, Dec 14 p 1314
 Trust Prosecutions, Nov 16 p 1055
 Trust Question, Constructive Programme on the, Dec 7 p 1233
 Trusts, Problems of the, Nov 9 p 1026
 Tube Works Consolidation, Scottish, Aug 10 p 317
 Tuechter, August H.:
 European Conditions, Oct 19 p 861
 Tunnel Ventilating Plant, Notable,* Aug 31 p 493
 Tupper, C. A.:
 Economic Changes and Better Business, Sept 21 p 610
 Heavy German Tools for Turbine Building,* Nov 9 p 1030
 Lessons from the Swiss Metal Industries,* Oct 5 p 748
 Pattern Handling in a Steel Foundry,* Aug 10 p 330
 Selling American Machinery in Europe, Aug 3 p 262
 Selling American Machine Tools in Europe, July 6 p 40
 Turbine Building, Heavy German Tools for,* Nov 9 p 1030
 Turret Equatorial Telescope,* Dec 21 p 1368
 Twentieth Century Loose Pulley Oil Cup, American,* July 27 p 214
 Twisting of Reinforcing Bars,* Sept 21 p 641

U.

- Union Switch & Signal Company:
 Another Plan for Stock-Owning by Employees, Aug 17 p 388
 Union Tee, New Jefferson,* July 27 p 206
 United States Arsenals, Scientific Management at, Nov 9 p 1022
 United States Cast Iron Pipe & Foundry Company:
 Annual Report, July 6 p 4
 United States Motor Company:
 Output, Aug 31 p 490
 United States Steel Corporation:
 And "Independent" Output, Nov 23 p 1127
 Attitude of Buyers of Steel and Independent Manufacturers Toward Suit, Nov 9 p 1002
 And Pittsburgh, Aug 17 p 381
 Bonuses to Employees, Dec 28 p 1385
 Cancellation of the Hill Ore Lease, Oct 26 p 884
 Committee on Steel Works Labor Conditions, Nov 9 p 1026
 Current Business, Aug 31 p 449
 Disintegration, Sept 28 p 662
 Electrical Equipment of Gary Coke Plant,* Dec 28 p 1406
 Gary Sheet-Bar Mill,* July 13 p 102
 Government Report on the, July 6 p 57
 Great Northern Iron Ore Lease, Oct 19 p 854
 Helps Its Competitors, Aug 24 p 402
 Investigation, July 27 p 196; Aug 3 p 259; Aug 10 p 313; Aug 17 p 366
 Labor Investigation, Oct 26 p 914
 Largest By-Product Coke Oven Plant in the World, Dec 14 p 1311
 Minnesota Steel Plant at Duluth,* Nov 30 p 1196
 No Potential Monopoly, Nov 23 p 1107
 Oil Pump House at Gary,* July 27 p 203

- One Investigation Ended, Sept 14 p 585
 Pacific Coast Selling Department, Sept 28 p 683
 Percentage of Production for 1910, Aug 3 p 281
 Plans for Duluth, Sept 21 p 626
 Quarterly Statement, July 27 p 197; Nov 2 p 937
 Sampling and Analyzing Cases, July 6 p 34
 Stands on Its Record, Sept 28 p 665
 Stanley Appeal to Prejudice, Nov 30 p 1169
 Suit to Dissolve, Nov 2 p 934 and p 952
 To Cancel the Hill Ore Lease, Oct 26 p 901
 Unfilled Orders, July 13 p 96; Aug 17 p 350; Sept 14 p 578; Oct 12 p 797; Nov 16 p 1069; Dec 14 p 1277
 Vast Growth of Assets, Sept 28 p 680
 Upton Nut Company:
 Sold to Bourne-Fuller Company, Nov 30 p 1182; Dec 7 p 1218
 Steel Plant,* Nov 2 p 960

V.

- Vaile-Kimes Company:
 Motor-Driven House Pump,* Sept 14 p 597
 Valves:
 Bates Improved Corliss Gear,* Aug 24 p 432
 Golden-Anderson Electrically Operated Stop,* Aug 10 p 335
 Harrison Notable Departure in Relief,* Nov 16 p 1085
 Jenckes Valve Gear,* Oct 12 p 810
 Lagonda Automatic Cut-Off,* Sept 21 p 640
 New List Prices for Iron Body Gate, Nov 2 p 977
 Scully Storle Brass Globe,* Oct 5 p 763
 Williams Cino Iron Body Gate,* Oct 19 p 871
 Vanadium Steel, Experiments on 0.2 Per Cent., July 27 p 205
 Van Dorn & Dutton Company:
 New Portable Electric Drills,* July 20 p 158
 Venezuela, Imataca Iron Deposit in, Aug 24 p 414
 Ventilating Plant, Notable Tunnel,* Aug 31 p 493
 Ventilation in Factory Heating, Aug 10 p 297
 Ventilator, Burt,* Sept 28 p 693
 Vessels for Panama and Pacific Trade, New, Oct 19 p 852
 Vilter Mfg. Company:
 Ammonia Compressor,* Sept 14 p 596
 Late Features of the Corliss Engine,* Dec 7 p 1261
 Virginia Iron, Coal & Coke Company:
 Annual Report, Sept 28 p 681
 Virginia Ore Development, Southwestern, Sept 28 p 681
 Vises:
 New Pratt & Whitney,* Aug 24 p 430
 Schulz Tilting,* Aug 24 p 433
 Vismara Steel Sheets, Aug 3 p 248
 Vom Baur, C. H.:
 Steel Castings from Electric Furnace,* July 20 p 148
 Vulcan Crucible Steel Company:
 High-Grade Steel, Oct 12 p 821

W.

- Wages:
 Amalgamated Scale Signers, July 20 p 143
 And Hours in the Iron Industry, Aug 10 p 336
 Sheet and Tin Plate Scale, July 6 p 42
 Wagner Electric Mfg. Company:
 New Single-Phase Electric Motors,* Nov 16 p 1080
 Walker, Albert H.:
 What the Sherman Law Forbids, Oct 19 p 837

Waltham Machine Works:

- New Thread Miller,* Nov 30 p 1194
 Ward Nail Company, July 6 p 5
 Warrior Sight Feed, William,* Nov 9 p 1040
 Warwick Iron & Steel Company:
 To Be Leased by Eastern Steel Company, Dec 21 p 1333; Dec 28 p 1398
 Washburn 15-In. Drill,* Dec 28 p 1410
 Washburn Motor-Driven Drill,* Sept 28 p 701
 Washburn Multiple Spindle Drill,* Oct 26 p 915
 Waterbury Farrel Foundry & Machine Company:
 Large Double-Acting Cam Press,* Oct 12 p 807
 Water Cooler, New Power Specialty,* Nov 9 p 1034
 Waterhouse, G. B.:
 Ferrotitanium and Its Use, July 27 p 180
 Titanium Alloys with and Without Aluminum, Nov 16 p 1056
 Titanium and Low-Carbon Basic Steel,* Dec 14 p 1306
 Water Softening, on a Large Scale, July 27 p 202
 Watson, James, & Co.:
 World's Production of Pig Iron, Aug 3 p 282
 Webster & Perks Tool Company:
 New Internal Combustion Engine,* Oct 12 p 820
 Weiss Briquetting Process for Ores and Flue Dust, Nov 30 p 1185
 Welder, New Thomson Electric,* Aug 10 p 329
 Welding and Cutting Machine, Davis-Bournonville,* Aug 31 p 472
 Welding, Autogenous, Not for the Weakened Structure, Oct 5 p 720
 Welding Machine, Economy,* Nov 9 p 1037
 Welding Machine, Oxy-Carbi New Portable,* Sept 21 p 628
 Welds by Different Methods, July 27 p 200
 Wells Bros. Company:
 Little Giant Serial Taps,* Oct 19 p 868
 Welsh Workers, American and German Steel Displaces, Aug 31 p 471
 Wentworth Institute, Boston:
 New Foundry and Mechanical School, Sept 28 p 699
 Western Conduit & Mfg. Company, Dec 21 p 1366
 Western Steel Corporation:
 Bankruptcy, Nov 2 p 982
 Bond Issue, Aug 17 p 351
 Meeting of Creditors, Dec 14 p 1298
 Receivership, Oct 19 p 852
 Western Wheel Barrow & Mfg. Company:
 New Plant, Sept 28 p 700
 Westinghouse Air Brake Company:
 Business, Sept 14 p 591
 Westinghouse Electric & Mfg. Company:
 Electric Switching Locomotive,* Sept 28 p 694
 Important Electric Contracts, Sept 21 p 646
 Improved Transformer,* Sept 21 p 645
 Meeting, Aug 3 p 283
 New Direct-Current Motor,* Aug 17 p 375
 New Officers,* Aug 10 p 318
 Steel Transformer Car,* Aug 3 p 278
 West Penn Steel Company:
 Improvements, Dec 14 p 1298
 Wheel Guard, Ransom Emery,* Nov 2 p 982
 Wheeling Corrugating Company:
 Catalogue, July 13 p 96
 Wheelwright, Thomas S:
 Production of Wrought Iron, Dec 7 p 1218
 White, Sir W. H.:
 Fritz Medal Presented to, Nov 23 p 1147
 Wiederholdt Construction Company:
 Chimney,* Sept 28 p 689

- Wiener Machinery Company:
Vogel & Schemmann Self-Contained
Sand-Blast Machinery, Nov 2 p
985
- Willey Machine Company:
Motor-Driven Bench Drill,* Sept 21
p 645
Motor-Driven Lathe Center Grinder,*
Nov 2 p 969
- Williams, D. T., Valve Company:
Cino Iron Body Gate Valve,* Oct 19
p 871
Warrior Sight Feed,* Nov 9 p 1040
- Windsor Machine Company:
New Shops,* July 6 p 44
- Winona Technical Institute, Sept 28 p
704; Dec 21 p 1369
- Wire and Horseshoe Pool Cases, Aug
10 p 323
- Wire and Rod Machines, New Philadel-
phia,* Nov 16 p 1082
- Wire Brush, F. & M., New,* Nov 2 p
981
- Wire Flattening Mill, August Schmitz,*
Dec 21 p 1362
- Wire Manufacturers Fined, July 27 p
181
- Wire Specialty & Machine Works:
New Plant,* Oct 5 p 755
Wire Twisting Machine,* Oct 19 p
867
- Wisconsin Bridge & Iron Company:
New Concrete-Steel Ore Dock, Nov 9
p 1041
- Women in the Metal Trades, Nov 30 p
1189
- Wood, Alan, Iron & Steel Company:
Charges Discrimination, Sept 14 p
578
- Wood, Henry M.:
Shop System for Greater Output,*
Aug 3 p 268
- Woodbridge, Dwight E.:
Mining News, July 13 p 98
Mining Notes, Aug 3 p 264
Ore Railroad Hearing, July 20 p 147
Taxable Valuation of Michigan Iron
Mines, Nov 9 p 1028
- Woodbury & Co.:
Aerial Camera,* Oct 19 p 869
- Woodward Iron Company:
Buys Vanderbilt Furnices, Nov 9 p
1020
Pig Iron Cost, Aug 10 p 319
Purchase of Birmingham Coal & Iron
Company, Nov 16 p 1057
- Worcester Gas Light Company:
Decision on Gas Producer Operation,
Oct 12 p 818
- Worcester Polytechnic Institute:
Aeroplane Propeller Testing Plant,*
July 20 p 152
Improved Hydraulic Testing Plant,
July 20 p 140
Washburn 15-In. Drill,* Dec 28 p 1410
Washburn Motor-Driven Drill,* Sept
28 p 701
Washburn Multiple Spindle Drill,*
Oct 26 p 915
- Works Improvements, Iron and Steel,
Nov 16 p 1054
- Works Management: Triumph Job Han-
dling System, Sept 21 p 638
- World's Production of Aluminum, Sept
7 p 507
- World's Production of Coal, Nov 30 p
1158
- World's Production of Pig Iron, Aug
3 p 282
- World Trademark Treaties, Sept 7 p
535
- Worth Brothers Company:
New Railroad, Nov 30 p 1201
- Worthington, Henry R.:
High-Duty Pumping Engine,* Oct 5
p 764
- Wrench, Gealy New Pipe,* Dec 28 p
1411
- Wrought Iron and Rerolled Steel,
Spheres of, Nov 30 p 1168
- Wrought Iron, Production of, Dec 7 p
1218
- Wrought Iron Versus Steel Pipe, Nov
30 p 1188
- Wyoming Steam Trap, Nicholson,* Nov
9 p 1041

Y.

- Yarnall-Waring Company:
Lea Recorder,* Dec 28 p 1404
- Youngstown Industries More Active,
Dec 7 p 1210
- Youngstown Sheet & Tube Company:
Annual Meeting, Aug 3 p 267
Extensions in Recent Years,* Sept 21
p 630
- Officers, Sept 14 p 578
- Profit Sharing Plan, Aug 17 p 385;
Aug 24 p 417

